

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

October 2, 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 second draft of the Proposed Amendments on May 25, 2012, and asked interested members of the public to review and comment on the draft. Staff received 4 responses from members of the public (all from regulated entities and/or their trade associations). District Staff reviewed all of these comments and considered them in detail in developing the final proposal that will be present to the District’s Board of Directors for consideration and adoption.

This document explains District Staff’s evaluation of each of the comments received on the Second Draft. The comments received are summarized below, along with District Staff’s responses to each one.¹ The comments are listed in alphabetical order based on the name of the commenter, as follows:

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Air District Staff thank all of the commenters for the time and effort they put into reviewing and commenting on the Second Draft. The input received from interested members of the public has helped District Staff to improve the final version of the Proposed Amendments substantially.²

¹ All of the comment letters are available in their entirety on the District’s website at www.baaqmd.gov/Divisions/Engineering/Proposed-Reg-2-Changes.aspx. (The comments received from Valero Refining Company – California have not been posted on the website because the commenter stated that they contain confidential business information.)

² District Staff also apologize for the delay in publishing these written responses. Staff considered all of the comments before finalizing the Proposed Amendments and intended to document their responses in writing for publication at the time the final version of the Proposed Amendments was issued. Certain members of the rule development team were unfortunately called away to deal with important family matters, however, and as a result Staff were not able to prepare this written document at that time. Staff regret any inconvenience that may have been caused by these circumstances.

COMMENTS OF CALPINE CORPORATION

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

Calpine Comment I – Support for Adopting PSD Program: The first section of Calpine’s comment letter was an introduction to and summary of the company’s comments, which are addressed in detail below. Calpine’s introduction also offered a further “strong endorsement” of District Staff’s goal of obtaining EPA approval of District “Prevention of Significant Deterioration” (PSD) permitting regulations for the Bay Area. Calpine stated that EPA approval of a District PSD program will “avoid unnecessarily duplicative and lengthy processes associated with the 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 PSD regulations. Air District Staff agree that having a single set of NSR permitting regulations for facilities in the Bay Area will simplify and streamline the permitting process.

Calpine Comment II.A. – NAAQS Protection Requirement: Calpine expressed a number of concerns about the proposed NAAQS Protection Requirement in proposed Section 2-2-308. Calpine’s concerns included the following:

- Calpine was concerned about how the requirement will work for non-attainment pollutants where background concentrations are above the NAAQS, and how an applicant will be able to demonstrate that it will not cause or contribute to a NAAQS exceedance where ambient concentrations already exceed the NAAQS. Calpine further expressed concern that this new requirement could act as an effective bar to any new development in areas where background concentrations exceed the NAAQS, because new and modified sources would not be able to make the required demonstration for such locations. Calpine stated that the appropriate way to address NAAQS protection for non-attainment areas is through the offsets requirement, not by preventing significant further contribution to existing NAAQS violations from new and modified sources.
- Calpine was also concerned about how modeling would be conducted for determining compliance with the ozone NAAQS, as modeling is very difficult for ozone because ozone formation depends on atmospheric chemistry. Calpine expressed concern about whether such modeling for ozone impacts was even possible. Calpine also stated that no other agency requires modeling for ozone impacts.
- Calpine also stated that 40 C.F.R. Sections 51.160(a) and 51.160(b) do not require the District to adopt such a modeling analysis provision.

Calpine commented that the District should not adopt this proposed provision; or at the very least, it should consider further how applicants can demonstrate that a source will not contribute to a NAAQS exceedance in areas where background concentrations are already above the NAAQS, and especially for ozone given the lack of effective modeling tools available. Calpine stated that the District should also consider further how this requirement might become an effective construction ban on new and modified sources in the Bay Area.

Response: These concerns are similar to those expressed by a number of commenters. District Staff have considered all such comments in developing the final version of the proposed NAAQS protection requirements, and have discussed the issues involved in the Staff Report for the proposed amendments (see Section IV.B.3.a.). With respect to the specific concerns cited by Calpine here, District Staff have considered these issues as follows.

With respect to ozone, the proposed NAAQS compliance requirement in the final version of proposed Section 2-2-308 does not require modeling for ozone impacts. The Proposed Amendments will not require such a demonstration for ozone for a number of reasons, including those identified by Calpine in the concerns it raised.

With respect to pollutants for which background concentrations exceed the NAAQS, there are no such pollutants in the Bay Area (other than ozone, for which this requirement will not apply as noted above). For all pollutants, current background levels are below the NAAQS and so there is some existing headroom to allow for new emissions increases without resulting in a NAAQS violation. Even for PM_{2.5}, for which the Bay Area is administratively designated as non-attainment, current levels are below the NAAQS according to the most recent monitoring data. Moreover, even if in future a situation arises where background concentrations are above the NAAQS, that would not prohibit new projects in those areas. Projects can still be approved in such areas by showing that they will not have a net emissions increase above the NSR “significance” levels. Moreover, even if a project will have a significant net increase, it can still satisfy the NAAQS protection requirement by demonstrating that its incremental contribution to existing ambient concentrations will be less than the *de minimis* levels that EPA has established through its “Significant Impact Levels” (SILs) for such modeling. And even where a project’s impact will be above the SIL, the project can still be permitted if it obtains emission reductions from existing sources in the area such that its contribution to the air quality violation will be counteracted by those other reductions. Of course, if a project will still end up making a significant contribution to an exceedance of the health-based NAAQS, it would not be able to obtain a permit. But preventing new and modified sources from causing or significantly contributing to unhealthy air quality in violation of the NAAQS is exactly the reason why the NSR program was created in the first place. In this regard, the NAAQS Protection requirements will play an important role in achieving the program’s NAAQS protection goals.

With respect to relying on offsets to address new emissions of non-attainment pollutants, the proposed NAAQS Protection Requirement is intended to address the potential for localized emissions increases that will not be fully counteracted by offsets that were generated with emissions reductions at different locations. If a facility undertakes a modification that will result in an emissions increase subject to offsets requirements, the facility could comply with the offsets requirements by providing banked emission reduction credits that were generated from shutting down a source on the other side of the Bay Area. Such a reduction will be effective in ensuring that there will not be any net increase region-wide, but the reduction may not actually fully counteract the localized impacts resulting from the new emissions from the modification. In such a case, the emissions from the modification could cause a NAAQS violation, notwithstanding the use of offsets. The proposed NAAQS Protection Requirement

would prevent such an outcome. As such, it will complement the offsets requirements in helping to ensure that the Bay Area attains and maintains the NAAQS.

With respect to EPA Region IX staff's comments about using a modeling analysis to satisfy the requirements of 40 C.F.R. Sections 51.160(a) and (b), Calpine is correct in observing that those provisions do not require a modeling analysis to demonstrate that new and modified sources will not interfere with attainment or maintenance of the NAAQS, and the District has never interpreted Sections 51.160(a) and (b) that way. EPA Region IX staff have suggested that a modeling requirement would be one appropriate way to comply with these provisions, however, and District Staff have noted that the NAAQS protection requirement will help EPA Region IX staff in determining that Sections 51.160(a) and (b) are satisfied. This is an additional reason that supports adoption of this requirement, over and above all of the other reasons as explained in Section I.C. of the May 25, 2012, Background Discussion document that District Staff published in connection with the Second Draft,³ and in IV.B.3.a. of the Staff Report.

Air District Staff have carefully considered all of these issues and have concluded that the proposed NAAQS Protection requirement in Section 2-2-308 will have important benefits that warrant adopting it. It will be a reasonable, targeted approach to ensuring that new and modified sources will not cause or significantly contribute to unhealthy air quality in violation of the NAAQS. Moreover, it will not be unduly burdensome for beneficial new development to comply with the requirement, as outlined above.

Calpine Comment II.B. – “PSD Pollutant” Definition: Calpine supported revisions to the definition of “PSD Pollutant” that District Staff made in the Second Draft of the Proposed Amendments to address “split attainment designation” situations – situations where the Bay Area may be designated as “attainment” for one standard and “non-attainment” for another standard for the same pollutant. Calpine also pointed to passages in the May 25 Background Discussion document on this issue noting that PSD requirements do not apply for pollutants for which the Bay Area is non-attainment. Calpine stated that the fact that PSD requirements do not apply to non-attainment pollutants suggests that the NAAQS Protection modeling requirement should not be applied to non-attainment pollutants either.

Response: District Staff acknowledge and appreciate Calpine's support for the revisions to the “PSD Pollutant” definition.

With respect to the fact that the PSD source impact analysis requirements do not apply to non-attainment pollutants, that is in fact one of the main reasons why the Proposed Amendments will add the NAAQS Protection requirement in Section 2-2-308. Preventing emissions increases from new and modified sources that will significantly contribute to NAAQS violations is equally important for non-attainment pollutants as it is for attainment pollutants. Indeed, in some senses it is more important for

³ See Background Discussion for Second Draft of Proposed Amendments & Response to Comments Received on First Draft, BAAQMD Staff, May 25, 2012, available at www.baaqmd.gov/~media/Files/Engineering/Proposed%20Reg%20Changes/2nd%20Draft/Background%20Report%20for%20Second%20Draft%20Amendments%20and%20Response%20to%20Comments%20on%20First%20Draft.ashx?la=en.

non-attainment pollutants. The NAAQS protection requirement will require permit applicants with significant emissions increases to demonstrate that they will not make any significant contribution to any such NAAQS violation. As noted above, there are a number of ways in which worthy projects will be able to make this demonstration, and the requirement will not act as a bar to beneficial development as Calpine suggests in its comments. Implementing the requirement in this way is a reasonable approach to ensuring that the NAAQS are protected while still allowing beneficial new development consistent with achieving the Bay Area's clean air and public health goals. There is nothing inconsistent between the PSD source impact analysis and the Section 2-2-308 NAAQS Protection analysis. To the contrary, they are actually complementary of each other.

Calpine Comment II.C. – NSR Reform: Calpine stated that it supports adopting the more flexible “NSR Reform” baseline provisions allowing the use of any 24-month period in the past 10 years as the baseline for calculating emissions increases (also known as the “10-year look-back” provision) for GHGs. Calpine commented that the more flexible NSR Reform baseline should also be provided for other pollutants as well as GHGs. Calpine stated that SB 288 is not a bar to adopting the NSR Reform methodologies for these pollutants. Calpine cited a number of other California air districts that have adopted PSD provisions utilizing the NSR Reform methodologies, and stated that the Bay Area Air District should do the same. Calpine also characterized District Staff's evaluation of SB 288 as barring the adoption of the NSR Reform approach for pollutants that the District regulated as of 2002 as an “uncritical assertion”. Calpine stated that the District should therefore adopt the NSR Reform methodologies for determining NSR applicability for all pollutants – or at least the more flexible baseline element of NSR Reform. Calpine was particularly concerned about PM_{2.5}, stating that the District has never regulated PM_{2.5} as a separate pollutant. Calpine stated that the District should adopt the NSR Reform methodologies (the more flexible baseline provisions, and also the actual-to-projected-actual emissions increase calculation) for PM_{2.5} in particular. With respect to the baseline calculation, Calpine asserted that the same policy reasons that support the more flexible baseline for GHGs also support using the approach for PM_{2.5}.

Response: District Staff acknowledge and appreciate Calpine's support for the proposal to use the “10-year look-back” for GHG baseline calculations.

With respect to using NSR Reform methodologies for other pollutants, District Staff addressed this issue in the May 25 Background Discussion document (pp. 24-25), and have done so further in the Staff Report for the Proposed Amendments (pp. 98-99). As explained there, SB 288 by its terms prohibits the Air District from relaxing any NSR regulations that were in effect as of the end of 2002. This includes NSR requirements – for both Non-Attainment NSR and PSD – for pollutants that were regulated as of that time.

The other air districts that Calpine cited have adopted PSD requirements by incorporating the federal requirements by reference, and that incorporation-by-reference has included the NSR Reform applicability methodologies. But District Staff understand that those other districts did not have any PSD provisions on the books as of 2002, and so they were not restricted by SB 288 for their PSD

programs.⁴ That is not the case with the Bay Area Air District. The District's current regulations include PSD requirements that were in effect in 2002, and the District is prohibited under SB 288 from relaxing them. District Staff also note that none of those other air districts have relaxed their existing Non-Attainment NSR applicability provisions to include the NSR Reform methodologies. Presumably, the reason why those districts are treating Non-Attainment NSR and PSD differently is that their Non-Attainment NSR provisions were in place in 2002 and are therefore subject to the SB 288 restriction, while their PSD provisions are new and thus not restricted by SB 288. The Bay Area Air District is not in that situation.⁵

With respect to PM_{2.5}, District Staff addressed this issue in the Background Discussion document, as Calpine noted. For the reasons explained there (and also in the Final Staff Report), District Staff disagree with Calpine's assertion that SB 288 "plainly" does not apply to PM_{2.5}. Calpine is correct to note that the PM_{2.5} fraction of airborne particulate matter has never been specifically used as the particle size reference in the regulations. But particulate matter has long been regulated using other size references (e.g., PM₁₀), and these regulations have meant that a source's PM_{2.5} emissions were regulated as a substantive matter.⁶ The situation with PM_{2.5} is therefore distinct from that of entirely new pollutants that have not been regulated before, such as GHGs. Calpine is certainly correct that there are arguments that can be made that PM_{2.5} should be treated as a "new pollutant" because prior regulations have never identified it specifically in regulating particulate matter. But claiming that SB 288 "plainly" does not apply greatly overstates the case. There are strong arguments contrary to Calpine's, and as District Staff pointed out in the May 25 Background Document and in the Final Staff Report, ARB's guidance memorandum on SB 288 does not support Calpine's position.⁷ For all of these reasons, District Staff have not adopted Calpine's suggested interpretation that SB 288 would allow the use of the NSR Reform applicability methodologies for regulating PM_{2.5} under the District's NSR program.

Moreover, compared with GHGs, it will make relatively little difference to how particulate matter is regulated whether the District uses the NSR Reform or pre-NSR Reform applicability methodologies for PM_{2.5}. The Bay Area is designated as "non-attainment" for PM_{2.5}, and so PM_{2.5} is not subject to PSD

⁴ At the very least, those other air districts did not have pre-existing PSD regulations that they relaxed to incorporate the NSR Reform methodologies. If any of those other districts had pre-existing PSD provisions that were subject to SB 288, the new federal requirements that have been incorporated by reference do not relax such requirements, they apply in addition to them.

⁵ District Staff also note – as Calpine itself recognized – that just because another air district has done something and was not challenged on it does not necessarily mean that the Bay Area Air District should follow suit. District Staff understand that these other air districts' adoption of PSD provisions was legally authorized for the reasons explained in the text above. But to the extent that this understanding is incorrect and these provisions violated SB 288, District Staff would not agree that the Bay Area Air District should follow their lead.

⁶ PM_{2.5} is a subset of PM₁₀, and so regulations that require controls of a source's PM₁₀ emissions necessarily mean that the source must be controlling its PM_{2.5} emissions as well.

⁷ ARB's guidance memo reasoned that SB 288 was aimed at ensuring that the NAAQS are protected, and that it does not apply for GHGs because no NAAQS have been established for GHGs. ARB did not specifically opine on the statute's applicability to PM_{2.5}, but under ARB's rationale the SB 288 prohibition would apply to PM_{2.5} because there are NAAQS for PM_{2.5} (and were as of 2002).

requirements. It is subject only to the non-attainment NSR requirements (the CA BACT/LAER, offsets, compliance certification, and alternatives analysis requirements). And all sources of PM_{2.5} emissions will already be subject to these requirements for their PM₁₀ emissions under current District regulations. It is unlikely that making a source subject to these requirements because of their PM_{2.5} emissions will require the source to do anything differently than what it is already required to do under the requirements because of its PM₁₀ emissions.

For all of these reasons, the Proposed Amendments do not use any of the NSR Reform applicability methodologies for the requirements applicable to PM_{2.5}. The Proposed Amendments provide the “10-year look-back” baseline provision for GHGs only.

Calpine Comment II.D. – Modifications of Gas Turbine/HRSG Power Generation Equipment: Calpine elaborated on an earlier comment regarding combined gas turbine/heat recovery steam generator (HRSG) equipment used in combined-cycle power plants, and on District Staff’s response to it. The comment concerned whether to treat such combined turbine/HRSG equipment groupings as a single “source” for purposes of determining whether a change in the equipment will be a “modification” under Section 2-1-234, or whether the turbine and HRSG should each be treated as a separate “source”. This distinction can be important in cases where a change increases firing capacity – and therefore emissions – from one piece of equipment (e.g., the turbine), but not from the combined grouping. In such a case, the change would be a modification to the turbine if they are treated as separate sources, because the turbine will experience an emissions increase. But the change would not be a modification if the combined grouping is treated as a single source, as the combined grouping will not experience an emissions increase. District staff responded that such situations should be addressed on a case-by-case basis, and that the definition of “source” is sufficiently flexible so that it can be applied to situations like this to treat equipment as a single source where that is appropriate and as multiple sources where that is appropriate. There is no need to specify in the rule how specific permitting situations at specific facilities will be treated. (See May 25 Background Discussion document, pp. 58-59.) Calpine stated that this response “accurately assesses” the considerations that arise in permitting multiple pieces of equipment that operate in close relation to one another in situations like this, and that Calpine is “encouraged” by District Staff’s understanding of the issue and “look[s] forward” to working with District Staff when situations such as this one arise. Calpine further commented that the District should revise the definition of “modification” to specify how exactly the District would treat this type of situation.

Response: Situations such as these are best addressed on a case-by-case basis, for the reasons explained in response to the earlier comment. Rather than try to specify in advance exactly how specific factual situations will be handled, it is preferable to state the rule that applies and then address each situation that arises according to its own facts and circumstances. Two related pieces of equipment can be treated as a single combined “source” where that is the most appropriate approach, and two related pieces of equipment can be treated as separate “sources” where that approach would be more appropriate. The District’s definition of “modification” in the Proposed Amendments is more than specific enough in setting forth the rules that will govern how changes at permitted equipment will be

handled in terms of whether they will be subject to NSR or not. There is no need to specify further how the rules will be applied in the myriad specific factual situations that may arise going forward.

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: CCEEB raised several concerns regarding the NAAQS Protection Requirement in proposed Section 2-2-308. The first concern involved modeling to demonstrate ozone impacts, and whether such modeling is even possible for ozone given current modeling tools. The second concern involved other criteria pollutants, including PM_{2.5} and SO₂. CCEEB stated that this new requirement would essentially prohibit new projects with significant emissions increases in areas where background concentrations are over the NAAQS. CCEEB was also concerned that projects with impacts below an EPA “Significant Impact Level” (SIL) would be prohibited in such a situation because they would still incrementally contribute to background concentrations. The third concern involved the potential for increases in background concentrations and/or reductions in the NAAQS. CCEEB stated that the potential for these developments in the future “would add uncertainty to the long-term impacts of 2-2-308.”

Response: With respect to ozone modeling, the District is clarifying in the final version of the Proposed Amendments that the modeling demonstration would not be required for ozone. Based on further discussions with EPA staff and others, it appears that modeling tools are not sufficiently advanced to allow for such modeling for ozone impacts. Apparently EPA does not even conduct such modeling for ozone impacts in connection with its own PSD permits. For these and other reasons, District Staff have concluded that this requirement would not be appropriate for ozone impacts.

With respect to other criteria pollutants, the requirement would not prohibit any worthwhile new development projects. First of all, background concentrations in the Bay Area are not above the NAAQS for any pollutants other than ozone, for which modeling will not be required. Even for PM_{2.5}, for which the Bay Area is administratively designated as non-attainment, background concentrations have come down to below the NAAQS as the District has demonstrated in its Clean Data Finding. Furthermore, even if background concentrations are above the NAAQS, beneficial new projects can avoid the NAAQS Protection requirement through “netting”, or showing that their net emissions increase (taking into account related emissions decreases within the past 5 years) will not be significant. 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 SIL. The requirement will use the same procedures as EPA’s PSD modeling, which establish that impacts below the SIL are considered *de minimis* and are not treated as causing or contributing to any NAAQS exceedance.⁸ And 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

⁸ 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.

any NAAQS exceedance. All of these compliance avenues will be available to proposed new sources. It is true that if a proposed source will still end up causing a 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 violating 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.

Finally, with respect to the potential for future developments that could lead to reduced headroom between background concentrations and the NAAQS, if the Bay Area's margin of compliance with the health-based air quality standards gets narrower, that situation would only heighten the need to make sure that new and modified sources do not put us over the standards and into a non-attainment situation. The District can obviously revisit this requirement in future if that situation does in fact arise. But it seems unlikely that the importance of ensuring that the air we breathe does not get so dirty that it violates the NAAQS will diminish over time.

CCEEB Comment 2 – Definition of “Modification”: CCEEB stated that adding the “federal backstop” provision in Section 2-2-234.2 would add unnecessary complexity. CCEEB stated that EPA has indicated that “NSR Reform is as stringent as earlier rules,” and therefore questioned the need for the federal backstop provision.

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. District Staff agree that it will add a certain additional degree of complexity, although NSR permitting is already a complex program and this change is unlikely to make any significant difference in the ease or difficulty of applying the regulations. But in any event, regardless of whether there will or will not be any additional complexity, EPA has made clear that the District must add this provision in order for EPA to approve the District's NSR program.

With respect to NSR Reform, the stringency of the District's regulations compared to EPA's NSR Reform approach is not directly implicated in EPA's comments that the District's modification test need to be revised. EPA's revised interpretation is that the District must now base its modification test on an actual emissions baseline, not on increases in potential to emit. The use of actual emissions as the baseline is common to both the pre-NSR Reform and NSR Reform approaches. (NSR Reform relaxed the provisions for selecting a baseline period, but the basic concept of using actual emissions as the baseline remains the same.)

CCEEB Comment 3 – Conversion of Banked PM₁₀ Emission Reduction Credits: CCEEB stated that it is concerned about the time that may be needed to go through the PM₁₀/PM_{2.5} conversion process for banked emission reduction credits. CCEEB fears that delays in the permitting process could result, and suggested that the District should develop a detailed plan for how the conversion process will work.

Response: The process for converting existing PM₁₀ credits into their PM₁₀ and PM_{2.5} fractions (and to account for condensable emissions) is relatively straightforward, and it is being specified in the proposed amendments to the banking provisions in Regulation 2, Rule 4. That said, District Staff do

recognize that there will be some work involved in pulling together the information required for the conversion for each existing banked credit and making the conversion calculations. To help avoid any delay in permitting from having to make the conversions, District Staff are proposing to have the changes to Regulation 2, Rule 4 become effective immediately upon adoption, so that holders of existing banked credits can start the conversion process right away, even before the new requirements for providing PM_{2.5} credits (or credits for condensable PM emissions) take effect. This will allow holders of existing credits to have the amount of PM_{2.5} emission reductions (and condensable PM emissions) reflected in their credits determined before such credits would ever need to be used. If the conversion is made ahead of time, there will be not by any delay resulting from having to make the conversion calculations during permit processing.

COMMENTS OF VALERO REFINING COMPANY – CALIFORNIA

Valero Refining Company – California (Valero) submitted a comment letter after the time period during which District Staff asked for comments on the Second Draft of the Proposed Amendments. Although District Staff received Valero’s comment after the requested date, District Staff still evaluated it as it related to important issues that Staff were considering in finalizing the Proposed Amendments. District Staff are therefore providing a written response here, to inform both Valero and other interested parties of how District Staff addressed these issues.⁹

Valero’s comments concerned how the proposed District PSD provisions would impact projects involving a refinery’s steam system. Valero noted that these steam utility systems differ in some respects from other refinery systems in that they are never taken completely offline, and they need to be able to always provide capacity to maintain facility operating reliability, safety and maintenance, as well as augment normal facility processes. Valero commented that the proposed PSD provisions do not address the complexities of such systems, and that it will be difficult to apply these provisions to systems such as a refinery’s steam system.

District Staff fully understand that many facilities – and refineries in particular – involve complicated processes. District Staff have considerable experience applying PSD requirements to such facilities through their implementation of the federal PSD program. And the proposed District PSD provisions incorporate the federal requirements verbatim. These rules are more than capable of addressing the complexity inherent in refinery operations, and have been doing so for many years. The one issue regarding these PSD provisions over which there has been any significant debate concerns whether or not to adopt the NSR Reform applicability methodologies. But under either approach the PSD program will have to face this same situation with complex refinery systems. Adopting the NSR Reform methodologies (e.g., measuring emissions increases based on projected future actual emissions instead of maximum permitted emissions) will not make the applicability provisions any simpler, and in fact it could have the opposite effect because the complexities involved in projecting future actual emissions. In many ways, having NSR applicability based on maximum permitted emissions instead of on future protected emissions is actually simpler to implement for complex operations. Accordingly, District Staff do not anticipate that it will be unduly difficult to apply the proposed PSD provisions to complicated refinery operations, and do not see such complexities as providing a compelling reason why PSD should be based on the refinery’s projected emissions instead of on its maximum permitted emissions. Both applicability methodologies will have to deal with the fact that refinery operations such as steam systems are complicated, and both methodologies are sufficiently robust to address such complicated situations. The Proposed Amendments therefore use the pre-NSR Reform applicability methodology, for the reasons explained in Section IV.B.3.g.ii. of the Staff Report.

⁹ Valero stated that the communication contained confidential proprietary business information. Accordingly, District Staff have not posted the comment letter on the District’s website and have removed specific identifying details from the examples Valero provided to illustrate its comments.

Valero also provided two examples of what it called “environmentally beneficial projects” that it claimed would not be able to be undertaken unless the District adopts the NSR Reform methodology for GHGs. Valero claimed that if these projects were subject to PSD permitting requirements for their GHG emissions, then the burdens associated with that requirement (i.e., implementing Best Available Control Technology) would mean that Valero would decide not to undertake them. (Note that the examples described below leave out specific identifying details about the projects because Valero claimed that the information it provided is proprietary business information.)

Project 1:

Project 1 involves the shutdown of Boiler B. The steam currently provided by Boiler B will be provided by Boiler A instead. The project would be beneficial because Boiler A is more efficient than Boiler B. Having Boiler A serve all the steam demand currently served by the two boilers will reduce emissions per unit of steam generated because of Boiler A’s higher efficiency.

Based on the numbers submitted by Valero, it does not appear that this project would be a “PSD Project” as defined under the Proposed Amendments. As such, it would not be subject to any PSD requirements.

A “PSD Project” is a project with a significant net emissions increase. For GHGs, this means a net increase of 75,000 tpy CO₂e or greater. Emissions increases and decreases are calculated as the difference between (i) the source’s actual emissions before the change and (ii) the source’s potential to emit after the change. Per the numbers Valero submitted here, the increase at Boiler A would be 77,000 tpy CO₂e, based on a difference between 66,000 tpy CO₂e before the change and 143,000 tpy CO₂e after the change. This would be a significant increase at Boiler A. But the definition of “PSD Project” is based on significant net increases, which takes into account creditable contemporaneous emission reductions. Boiler B will have a decrease of 7,000 tpy CO₂e, which is its actual emissions before the change. The net emissions increase from Project 1 will therefore be 70,000 tpy CO₂e. The project will not involve a significant net increase in GHG emissions and so it will not be a “PSD Project” as defined in the Proposed Amendments. Project 1 would therefore not be subject to PSD requirements.

Project 2:

Project 2 involves a modification project to make changes to the burners in a furnace. The modification will not affect the capacity of the furnace. The furnace has a Potential to Emit GHGs of 328,000 tpy CO₂e. The facility’s actual GHG emissions averaged over the highest 24-month period out of the past 10 years – which is how the Proposed Amendments will define the actual emissions baseline for GHGs – is 255,000 tpy CO₂e.

This project would also not be a “PSD Project” as defined under the Proposed Amendments, based on the numbers provided by Valero, and would not be subject to any PSD requirements. The difference between its 255,000 tpy actual emissions before the change and the 328,000 tpy potential emissions after the change is 73,000 tpy. This is not a “significant” increase in emissions, and so the project is not a “PSD Project”. Project 2 would therefore not be subject to PSD requirements.

Based on the above analyses, District Staff do not see how either of these projects would be affected by the proposed incorporation of PSD requirements for GHGs. PSD is simply not implicated for either of them.

Moreover, even for projects where PSD requirements would apply, District Staff disagree with Valero's general contention that basing PSD applicability on enforceable permit limits instead of unenforceable emissions projections would hinder beneficial refinery improvements projects and thus lead to higher emissions. District Staff responded on these issues based on comments made by Valero and others on the first draft of the proposed amendment in response to Comment No. III.2 in the May 25 Background Discussion document. District Staff have also provided further discussion in the Staff Report, in Section IV.B.3.g.ii. For all of the reasons Staff have discussed, it would not be appropriate to base PSD permitting for GHGs simply on a facility's unenforceable projections of what emissions might be in the next 5 years. Such an approach would create a real possibility for significant emissions increases that would not comply with applicable PSD requirements. If a facility wants to undertake a beneficial improvement project that will actually reduce emissions and avoid significant increases that would trigger PSD, the facility can do so without having to comply with PSD simply by agreeing to an enforceable permit limit to keep emissions from going up by a significant amount. Alternatively, if it is not fully convinced that it can avoid a significant emissions increase, it can demonstrate that the project will be using the most efficient equipment that can be justified based on cost considerations (i.e., BACT). Neither of these approaches will be particularly burdensome for the type of beneficial efficiency improvement projects that Valero seems to be concerned about.

COMMENTS OF WESTERN STATES PETROLEUM ASSOCIATION:

The District received the following comments from the Western States Petroleum Association (WSPA). For ease of reference, this response adds numbers to the comments according to the bold headings that WSPA used in its comment letter. The headings were unnumbered, but they were useful in breaking out the specific issues that WSPA raised. Where a heading covered multiple discrete issues, the following responses break them out with numbers and letters (e.g., Comment 1 and Comment 1.a.).

WSPA Comment 1 – Accelerated Permitting Program: WSPA expressed a concern about language in the Second Draft limiting use of the Accelerated Permitting Program for sources subject to New Source Performance Standard (NSPS) requirements. WSPA stated that this restriction would severely hamper refineries' ability to use this program, as most of their sources are subject to NSPS.

Response: District Staff's concern regarding NSPS requirements addresses the potential for a situation where a facility modifies a source under the Accelerated Permitting Program without considering whether and how the modification may be subject to NSPS requirements. If a facility were to plan a project and start construction on it under a temporary permit issued through the Accelerated Permitting Program, but without having considered how NSPS might apply to the project, the facility could find itself completing the project and then having to go back and redo the work to ensure that NSPS requirements are satisfied. Having to go back and address unanticipated NSPS requirements after the fact could be difficult and costly for the facility, and would not be an optimal outcome for anyone involved. The purpose of the provisions in the Second Draft limiting the use of the Accelerated Permitting Program for NSPS sources was intended to address the potential for such a situation to arise. District Staff did not intend to prohibit the use of the Accelerated Permitting Program for NSPS sources, as long as this situation can be avoided.

To address this concern without limiting the use of the Accelerated Permitting Program in appropriate situations, District Staff have replaced the prohibition on sources subject to NSPS requirements with a requirement to certify that NSPS requirements have been reviewed and considered by the applicant. As long as the facility has reviewed such requirements in planning its project and is comfortable that the project will satisfy them, the potential for unanticipated surprises later on will be addressed. Requiring permit applicants to do so, and to certify in their application under the Accelerated Permitting Program that they have done so, will avoid potential problems on this issue without creating an absolute prohibition on using the Accelerated Permitting Program for sources subject to NSPS in appropriate situations. Permit applicants will of course bear the risk that they could misinterpret NSPS requirements in some way and could still find themselves in a situation where they would have to go back and retrofit their equipment after the fact to address NSPS requirements. But at least they will be doing so with full knowledge of the risks and issues involved and can take appropriate steps to address them.

WSPA Comment 1.a.: WSPA also expressed a concern about the timing for issuing temporary permits to operate under the Accelerated Permitting Program. WSPA noted that time is of the essence in permit applications under the Accelerated Permitting Program. WSPA suggested that the District should always use email to transmit temporary permits under the program; and also suggested that the District should

specify in the regulation that the APCO shall “promptly” issue temporary permits upon receipt of all the required application materials.

Response: District Staff agree that temporary permits under the Accelerated Permitting Program should be processed and issued as expeditiously as possible. Staff agree that email is an excellent tool for transmitting documents quickly, and should be used for all such communications where appropriate. The proposed language addressing the Accelerated Permitting Program allows for the use of email. (Regulatory language does not normally specify details such as what form of communication District staff members will use in specific situations.) Staff also agree that permit applications should be processed and issued promptly, and have added that word in the Proposed Amendments.

WSPA Comment 2 – Definition of “Alter”: WSPA also commented on the definition of “alter” in the second draft. WSPA pointed to an example of an alteration listed in the May 25 Background Discussion document that read “burner replacement – identical or equivalent, no increase in max. firing rate.” WSPA requested that District Staff clarify that an identical burner replacement should not be treated as an “alteration” and would not require the owner/operator to submit a permit application.

Response: This comment is correct. Per Section 2-1-301, replacement of components with identical components is not an alteration and does not require an authority to construct. This example was included in error, and it has been removed from the discussion of the types of projects that are “alterations” and require an authority to construct in the Staff Report.

WSPA Comment 2.a. – Permit Conditions Necessary To Avoid “Modification”: WSPA also commented on the language in the definition of “alter” regarding permit conditions that are imposed to keep an alteration from becoming a modification. WSPA noted District Staff’s stated intent that such permit conditions would be imposed in order to keep a change made at a source from increasing the source’s PTE in a manner that would constitute a “modification”. WSPA suggested that the District should use language stating explicitly that permit conditions can be imposed to limit increases in the source’s PTE in a manner that would constitute a modification.

Response: WSPA is correct in noting that the cited language involves the use of permit conditions to keep a change at a source from becoming a “modification” subject to NSR Requirements. Limiting emissions increases in this manner to ensure that they will not become subject to NSR is a widely used permitting tool. It benefits the District and the public by limiting emissions increases, and it benefits project applicants by obviating the need to implement NSR. The language used in the Proposed Amendments regarding the purposes for which such permit conditions will be imposed – “to ensure that the change . . . will not result in a modification” – adequately captures this concept. There is no need to specify that permit conditions will limit the source’s PTE to ensure that the change does not become a modification, because that is exactly what permit conditions do – they limit the source’s PTE. Moreover, to the extent that the District’s “modification” test will involve increases based on projected actual emissions under the “federal backstop” provision in Section 2-1-234.2 and not just on increases in PTE, adding WSPA’s suggested language could actually cause more confusion than clarity. For these reasons, the final version of the Proposed Amendments uses the same language in the second draft, which

clearly and unambiguously captures the concept involved here of using permit conditions to keep a change at a source from becoming a “modification” in order to avoid having to implement NSR requirements.

WSPA Comment 3 – Definition of “Modification”: WSPA commented that the District should not adopt the “federal backstop” provision for the definition of “modification”. WSPA commented that adding this element to the definition would add lots of complications to the existing modification test, and also stated that the “federal backstop” is not necessary to satisfy EPA’s NSR Requirement as District Staff explained in May 25 Background Discussion document. WSPA stated that “[t]he backstop only makes sense if EPA requires it for approval otherwise it only adds significant complexity and confusion with no benefit.”

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. See also Staff’s response to CCEEB Comment No. 2 above.

WSPA Comment 3.a. – Typographical Error in “Modification” Definition: WSPA noted that there was a typographical error in the “modification” definition language in the Second Draft. It incorrectly referenced the definition of Potential to Emit as being in Section 2-2-217, not Section 2-1-217.

Response: This reference has been corrected in the final version of the Proposed Amendments.

WSPA Comment 3.b. – Increases in PTE That Do Not Necessitate Revisions to Permit Conditions: WSPA opined that the current Section 2-1-234 looks to increases in physical capacity only for “sources that have never been issued an ATC and that do not have conditions limiting daily or annual emissions.” WSPA commented that under current rule, if a source has a permit limit that is above its physical capacity, then the source should be allowed to increase its physical capacity up to the permit limit without being treated as a “modification”. WSPA gave an example of a source that was permitted and built in 2010, but which ended up getting built at only 98% of design capacity because of an error in construction (such as the wrong valve installed, incorrect metallurgy, unforeseen fouling, etc.). The facility then plans to fix the problem in 2012 during the first maintenance turnaround to get back up to 100% capacity. WSPA stated that under the proposed definition of “modification”, this would be a modification and would require BACT – but that under the current definition it would not be a modification because it is not increasing emissions above any limitation in its permit. WSPA commented that treating the source as a modification would be a disincentive to pursuing such project, with virtually no environmental benefit because a BACT review was completed very recently and any air quality impacts analyses were done at the full permitted emissions rates. WSPA therefore commented that the “modification” definition should allow a source’s capacity to be increased without being a “modification” as long as permit limits are not increased; or at the very least there should be an exemption from the BACT requirement for sources that installed BACT in the previous 5 years. WSPA stated that without such relief, there will be a disproportionately large cost impact for affected facilities compared to the environmental benefit.

Response: The District’s current “modification” test is intended to apply to all increases in potential to emit, whether they result from increases in a source’s permit limits or increases in the source’s physical capacity to emit air pollutants. A source’s permit limits are usually the limiting factor in establishing how much the source can emit, because there is not normally any reason why one would impose a permit limit if the source cannot physically emit above that level in the first place. In cases where the permit limit is higher than the source’s physical capacity to emit air pollutants, it is the physical capacity that establishes the potential to emit, and it is an increase in this physical capacity that results in a “modification”. This is how the District’s current “modification” test works, because increases in physical capacity are defined as “modifications” under Section 2-1-234.3. This subsection applies to sources that “do not have conditions limiting daily or annual emissions.” Where the source has a permit condition that is higher than what the source could physically emit, this condition is not effective as the limit on daily or annual emissions, and it is not a “condition limiting daily or annual emissions” under subsection 234.3. To the contrary, in that situation it is the source’s design and operational constraints that limit emissions. Any relaxation in those constraints would be a “modification” under this definition.

District Staff would obviously be concerned about the example given in the comment where the facility designed and permitted a source but made some error in constructing it such that it was not built with the same capacity as was permitted. If such a situation was to arise in real life, District Staff would need to review the specific situation and determine how to address it on a case-by-case basis, but as a general matter it is likely that the best approach would be to allow the facility to make the necessary fix under the original authority to construct. Under the hypothetical example as WSPA has presented it, it would not appear to be appropriate to prohibit fixing “an error in construction” that prevented the construction from matching what was authorized under the authority to construct. Addressing such situations on a case-by-case basis would be preferable to creating a blanked loophole in the regulation for cases where a source may happen to have a condition in its permit somewhere that is not the effective limit on the source’s actual capacity to emit air pollution.

Finally, regarding an exemption for BACT, BACT is required whenever a facility makes a modification that triggers the requirement, and it would not be appropriate to exempt subject sources from this requirement. To the extent that WSPA is concerned about sources being subject to BACT that have only recently gone through a BACT review, if a source has just recently installed BACT controls than it is unlikely that a subsequent BACT review a short time later would require it to do anything different. If the source is complying with BACT established as of 2010, it is unlikely that it will need to do anything differently as a result of a BACT review in 2012. It is likely that the same control technology and same emission limits it is already implementing will satisfy the BACT requirement as applied in 2012. Conversely, if technology has advanced so much in the interim that there are new requirements that can effectively be applied to achieve additional emission reductions, then there is good reason why the facility should implement such requirements if it makes a further modification in 2012.

WSPA Comment 4 – Definition of “Modification”: WSPA requested that the District insert language stating that “hourly design or engineering information by be multiplied by 24 to determine daily potential to emit and the daily potential to emit may be multiplied by 265 to determine annual potential to emit, unless the source cannot operate at its full potential to emit for 24 hours per day or 365 days

per year or there is some other reason why short-term potential to emit does not accurately represent longer-term potential to emit”. WSPA stated that this language “is particularly important since many sources such as boilers and furnaces have design or engineering rates based on MMBtu per hour.”

Response: The principle expressed here is inherent in the concept of PTE. All relevant information is taken into account in determining a source’s maximum potential emissions. All design and engineering information is taken into account, including hourly information and daily information and all other relevant information, and WSPA’s suggested language does not add anything in this regard. The Proposed Amendments include language about using short-term permit limits to establish longer-term PTE to simplify the process by obviating the need to go back to the underlying design and engineering information where a permit limit establishes the PTE. Where PTE is based on the underlying design and engineering information instead of on permit limits, this same rationale does not apply. In that case, it makes sense to go back to the underlying engineering information to determine the long-term PTE. Information on short-term emission rates or operating capacities should be reviewed of course, and can be used in establishing longer-term PTE where relevant, and this is fully consistent with the language of this provision as written. District Staff therefore disagreed that WSPA’s additional language is necessary for situations where long-term PTE is based on the underlying technical information, because the type of information review contemplated by this language is already provided for in the language that Staff are proposing.

WSPA Comment 4.a.: WSPA noted that under District Staff’s proposal, the effective date of the new PM_{2.5} requirements will not be precisely known until it occurs. WSPA stated that this will add uncertainty for facilities planning projects over the coming months. WSPA agreed with the concept that the Proposed Amendments should not be made effective immediately to avoid a “SIP gap”, but stated that it will be difficult to understand which definition of “modify” will apply to upcoming projects.

Response: District Staff acknowledge WSPA’s support for the proposal to make the revisions effective upon EPA’s approval of them. District Staff do not expect that the uncertainty about when EPA will finalize its approval will cause undue confusion, and agree that the complications that would be created by a “SIP gap” would cause far greater uncertainty and confusion.

WSPA Comment 5 – PM_{2.5} Definition: WSPA stated that the definition of PM_{2.5} should be “corrected” to be identical to the EPA definition, or there will be a potential to cause confusion.

Response: The District’s definition of PM_{2.5} is substantively identical to EPA’s definition – i.e., particulate matter with a nominal aerodynamic diameter of less than or equal to 2.5 microns, including both filterable and condensable emissions. District Staff do not see any potential for confusion over the definition of this term.

WSPA Comment 6 – “Support Facility” Definition: WSPA suggested not using the hard-and-fast 50% threshold for establishing the “support facility” relationship. Instead, WSPA suggested specific language that a support facility must be one that “significantly” assists in the production of the principal product.

Response: District Staff agree that this would be an appropriate test that would make it clear that a support facility needs to have a significant connection to the principal facility in order to be treated together for NSR purposes, but without creating a bright-line mandatory threshold for how the connection must be demonstrated. The final version of the Proposed Amendments incorporates this suggestion. The fact that over 50% of a facility's output goes to support the principal facility can still be relied on as an indication that the facility "significantly assists" in the operation of the principal facility and is therefore a "Support Facility", but the 50% threshold will not be a definitive bright-line requirement.

WSPA Comment 7 – Scope of Revisions to Reg. 2-2: WSPA objected that the Proposed Amendments add some new requirements that go beyond the specific amendments that District Staff said they were considering at the public workshop in February. WSPA stated that these additional proposals "go far beyond clarifications or changes necessary to obtain PSD delegation."

Response: The District is updating its NSR and Title V permitting rules for a number of reasons, and not simply because of the need to add PM_{2.5} non-attainment NSR requirements and to adopt PSD provisions for EPA approval. Those recent developments have obviously played in an important role in driving this regulatory update project, but the District is also using this opportunity to address other elements of the rule that need updating. All of the changes being made in the Proposed Amendments are necessary and appropriate to update the District's regulations, as explained in more detail in the Staff Report for the Proposed Amendments.

WSPA Comment 8 – Complexity of Regulations: WSPA claimed that additional new requirements being added the Regulation 2 will "increase the work and the time necessary to submit and evaluate applications." In particular, WSPA pointed to the fact that the rule would apply multiple different baseline periods and different measures of future emissions that would have to be evaluated for determining PSD applicability.

Response: New Source Review is a complex permitting program, but affected facilities – and in particular those of WSPA's members – have sufficient experience with the program to be able to understand how it works and proceed accordingly. In addition, District Staff are always available to answer questions and provide guidance in specific instances about how the regulations will apply. With respect to the point about multiple baseline periods and different measures of future emissions, WSPA itself has been requesting that the District use such multiple procedures. WSPA has consistently requested that the District use the most lenient baseline period and future emissions calculation possible under the law, which means using different provisions in different situations where certain less stringent provisions are allowed. District Staff do not expect that having to use different baseline periods and future emissions calculation procedures will be unduly difficult for WSPA's member companies – or for anyone else for that matter. The benefits from using the different baseline periods where they are provided more than outweigh any additional complexity that may be involved.

WSPA Comment 9 – Permitting "Workflow": WSPA expressed concerns about the impact of the Proposed Amendments on the permitting process, and whether they can be "incorporated in a practical,

streamlined manner into the permitting process.” WSPA suggested that District Staff should develop “workflow process diagrams” that lay out the permitting process for each pollutant in order to present how permit applications should be prepared and evaluated. WSPA suggested that such diagrams could also help identify overlapping requirements, could help identify where rules could be simplified, and could “be a test” of whether the language being proposed is what the District actually intends.

Response: The Proposed Amendments will not significantly change the permitting process, other than by streamlining PSD permitting so that PSD requirements are implemented through the District’s Authority to Construct instead of through a separate federal PSD permit. The Proposed Amendments will revise some of the substantive standards that apply to projects under the District’s permitting regulations, but the permitting process through which applications are reviewed and permits are issued will not change in any significant way.¹⁰ District Staff agree that diagrams that outline the permit review process would be a good idea to help District Staff and others understand exactly how the process works, and District Staff will consider adding such diagrams when they revise the District’s permitting handbook to reflect the changes being made in the Proposed Amendments.

WSPA Comment 10 – Time Needed for Permit Review: WSPA suggested that the proposed amendments “will add significant time” to the permitting process. WSPA suggested that the District should develop “timelines” for the permitting process, to help identify “opportunities for streamlining the requirements and reducing the time to obtain permits.” WSPA noted that reducing or avoiding permitting delays is a critical concern.

Response: As noted above, the Proposed Amendments will not significantly change the permitting process, other than through streamlining PSD permitting by incorporating it within the District’s own NSR program. District Staff do not expect that the Proposed Amendments will add any time to the permitting process, and if anything will reduce the total time needed for project permitting. Furthermore, District Staff share WSPA’s concern about reducing and avoiding delays in permitting. District Staff are taking steps to address this concern in a number of ways, including but not limited to updating Regulation 2. District Staff have met with representatives from the regulated community regarding these concerns and will continue to work with them in the future to expedite and streamline NSR permitting as much as possible.

WSPA Comment 10.a. – Potential for Delays Associated with NSR Reform Issues: WSPA also stated that adopting PSD requirements without using the less stringent “NSR Reform” applicability tests will “result in lengthy PSD permitting” for beneficial projects, and that delays involved in PSD permitting will cause environmentally beneficial projects to be canceled. WSPA attached a list of hypothetical situations where a project would trigger PSD permitting requirements under the pre-NSR Reform applicability test but would not trigger them under NSR Reform. WSPA stated that the possibility of having to comply with PSD requirements would likely cause these projects to be canceled because of the costs and delays associated with such requirements.

¹⁰ There will be a few minor changes, such as an expansion of the public notice and comment requirements, but these changes will not have a significant impact on the overall process.

Response: District Staff disagree that there will be a “lengthy PSD permitting” process if the District does not adopt the relaxed applicability standards used in NSR Reform. The permitting process will actually be substantially streamlined by having PSD requirements implemented through the District’s authority to construct rather than through a separate federal permit.

The fact that the District’s program will base applicability on enforceable permit conditions, rather than on the facility’s unenforceable projections of what its emissions might be, does not alter this conclusion. The District’s program may cover some potentially significant increases that would otherwise be excluded under the less stringent federal test, but ensuring that such significant increases implement PSD requirements will not delay the permitting process. Projects that will result in potentially significant increases are subject to 3 requirements under the PSD program (for each pollutant for which there will be a potentially significant increase): (i) the facility must implement cost-effective Best Available Control Technology (PSD BACT) for such pollutants; (ii) the facility must demonstrate that it will not cause or contribute to any exceedance of a NAAQS for such pollutants; and (iii) the permit must go through a 30-day public notice and comment period. Implementing these requirements can be accomplished during the permit review process that is required anyway for issuing an Authority to Construct under all of the District’s other existing NSR requirements. Adding in these three extra PSD requirements is not likely to cause any additional delay.

With regard to the hypothetical examples WSPA provided, District Staff reviewed them and did not find anything to suggest that adopting a District PSD program would lengthen the permitting process as WSPA claims. WSPA stated that the examples it provided are situations where environmentally beneficial projects would be delayed or cancelled because of the delays and other burdens associated with PSD requirements. But none of the examples provides any explanation to support these claims. To the contrary, WSPA’s examples are all based simply on conclusory assertions that delay will inevitably result from having the District take over implementation of PSD permitting. In fact, only the first 3 of WSPA’s 5 examples even mention any burdens associated with PSD permitting, and each of these simply provides one sentence stating without any further explanation that delay will result. For the first example, WSPA simply states that “[g]iven the uncertainty of what constitutes BACT for CO₂e and the additional costs and timing to obtain a PSD permit, the project would likely be cancelled.” For the second example, WSPA simply states that “[g]iven the additional costs and timing to obtain a PSD permit; the project would likely be cancelled.” And for the third example, WSPA simply states that “[d]elays through the PSD process could result in delays in implementing the clean fuels or source water stripping improvement projects.” District Staff disagree that these examples suggest that having the District implement PSD permitting will hamper or delay any beneficial projects, even under the pre-NSR Reform applicability tests.

WSPA Comment 11 – “Achievability of Compliance”: WSPA also commented on what it called the “achievability of compliance”. WSPA’s concerns include the following:

- A concern that companies could choose not to locate new facilities or expansions in the Bay Area because they cannot comply with permitting requirements;

- A concern that if sufficient PM_{2.5} offsets are not available for new or modified facilities, the District might be forced to charge fees in lieu of offsets or waive regulatory requirements, as has happened in other Districts;
- A concern that adopting PSD requirements without using the less stringent “NSR Reform” applicability tests may add delay or prohibit beneficial GHG reduction projects;
- A concern that the NAAQS Protection modeling requirement may prohibit new or modified sources in non-attainment areas since by definition non-attainment areas already have background levels over the NAAQS.

Response: District Staff have addressed the majority of these concerns already in other contexts. In addition to what District Staff have explained in those contexts, Staff note the following points. The District adopts its regulations so that companies in the Bay Area can comply with them in a reasonable and cost-effective manner, and there is no indication that the Proposed Amendments will cause any company to shut down or to move any new facility or expansion outside of the Bay Area. The Bay Area currently has a substantial inventory of PM emission credits available for use, and these will be available to satisfy PM_{2.5} offsets requirements. There is no indication that sufficient PM_{2.5} offsets will not be available in the Bay Area. Basing PSD permitting for GHGs on enforceable permit limits, rather than simply on a facility’s unenforceable projections of what its emissions might be, will not delay or prohibit beneficial GHG reduction projects. The District encourages such projects, and the District’s PSD requirements will not be applied in a manner that will cause affected facilities to forego beneficial projects that they would otherwise want to implement. And the new modeling requirements will not apply for any pollutants for which background levels are over the NAAQS. Moreover, even if such a situation was to arise in the future where background concentrations were over the NAAQS, the NAAQS protection modeling requirement would not act as a blanket prohibition and would still allow projects to go forward where they can demonstrate that they will not result in a significant contribution to a NAAQS exceedance.

WSPA Comment 12 – “Multi-Pollutant Approach” to Air Quality Regulation: WSPA noted that as a general policy, the District emphasizes a multi-pollutant approach to regulating air pollution. WSPA stated that District Staff noted in connection with the proposed amendments that NO_x reductions can be more important than CO reductions given the Bay Area’s non-attainment status for ozone and NO_x’s status as an ozone precursor. WSPA stated that the proposed amendments “would not allow for such flexibility.” Specifically, WSPA stated that beneficial projects that reduce some pollutants, but which may cause a slight increase in other pollutants, might face permitting difficulties if modeling showed that the increase would cause a NAAQS violation, or if controls required by the District’s achieved-in-practice BACT requirement (LAER) were not cost-effective for the facility. WSPA stated that in such a case the facility may decide not to implement the project and the associated reductions would not be realized.

Response: District Staff agree that the best approach to improving air quality and promoting public health is a holistic one, and WSPA is correct that the District emphasizes a multi-pollutant approach for this reason. District Staff disagree, however, that the Proposed Amendments would not allow for any flexibility to take such a holistic view. As WSPA notes, the Proposed Amendments do provide for such

flexibility in appropriate circumstances, such as deciding when a certain type of control technology or emissions limitation is warranted under the PSD BACT requirement. Where reducing emissions of one pollutant would come at the expense of increasing emissions of another pollutant, the District can take a multi-pollutant approach and establish the requirement in a manner that best promotes air quality across all air pollutants.

To the extent that WSPA is suggesting that the District should relax current requirements for some pollutants to encourage voluntary reductions in other pollutants, however, District Staff disagree that any such relaxation is appropriate. The District can achieve emissions reductions across the board and promote overall air quality without having to relax any of its existing protections. Moreover, relaxation of any existing rules would be prohibited by SB 288.

To the extent that WSPA intends this comment as a further argument in favor of adopting the “NSR Reform” applicability methodologies, District Staff have addressed the NSR Reform in a number of other areas, including in Section IV.B.3.g.ii of the Staff Report and in response to the next comment below. District Staff refer to those discussions for why it is pursuing the best policy approach with respect to NSR Reform.

WSPA Comment 12.a. – NSR Reform: WSPA cited an EPA document claiming that the relaxations to the applicability provisions of the NSR program that EPA adopted through its “NSR Reform” initiative would not result in any overall detriment to air quality.

Response: Regardless of what EPA stated in support of its NSR Reform initiative, the California legislature disagreed and adopted SB 288 to prohibit California’s air districts from following suit. The District is therefore prohibited from adopting the NSR Reform approach. (GHG permitting under the PSD program is the sole exception; as explained elsewhere the Proposed Amendments do adopt the appropriate elements of NSR Reform for GHGs.) These issues are discussed at length in Section IV.B.3.g.ii of the Staff Report, and District Staff refer to that analysis for the reasons why the Proposed Amendments incorporate the most appropriate policy choice.

WSPA Comment 13 – CO and PM₁₀: WSPA suggested that the District remove the Non-Attainment NSR requirements for CO and PM₁₀ because the Bay Area is no longer classified as non-attainment of the CO and PM₁₀ NAAQS. WSPA stated that the federal NSR requirements no longer require Non-Attainment NSR for these pollutants, and stated that the Sacramento air district recently removed CO and added provisions eliminating PM₁₀ requirements upon EPA designation of that air basin as attainment for PM₁₀. WSPA suggested that the CO and PM₁₀ Non-Attainment NSR requirements should be removed, and that Regulation 2 should specify that Non-Attainment NSR requirements will no longer apply to any pollutant for which the District has been designated attainment.

Response: CO and PM₁₀ are currently subject to Non-Attainment NSR requirements such as BACT, and have been since before 2002. The District is therefore prohibited under SB 288 from relaxing these requirements. Moreover, District Staff believe that it remains important to require emission controls such as BACT for these pollutants, even with the Bay Area’s current “attainment” status. But even if the District wished to remove PM₁₀ offsets requirements, it would be prohibited from doing so by SB 288.

WSPA Comment 13.a – Attainment Designation for PM_{2.5}: WSPA also suggested that the District should pursue an attainment designation for PM_{2.5}, and if re-designation is approved then it should not add Non-Attainment NSR requirements for PM_{2.5}. WSPA also suggested that the District should add provisions that would make Non-Attainment NSR requirements sunset in the event that the District is re-designated as attainment. WSPA’s suggested alternative would add blanket language stating that any Non-Attainment NSR requirements do not apply to any pollutant for which the Bay Area is attainment.

Response: District Staff believe that it would be premature to pursue an attainment re-designation for PM_{2.5} at this time, given current monitoring data for PM_{2.5} concentrations in the Bay Area. Although PM_{2.5} concentrations have been coming down and are now below the NAAQS, the District does not have a long history of low concentration data to rely on. Moreover, although current air quality is now below the NAAQS, the District does not intend to relax its efforts to address PM_{2.5} and to make further improvements. District Staff will continue to monitor the situation going forwards, and will consider seeking an attainment designation if further developments warrant it. With respect to language regarding the sunset of Non-Attainment NSR requirements in the event of an attainment re-designation, District Staff are disagree that such blanket language would be appropriate, for several reasons. First, for most regulated pollutants, eliminating any such provisions would be a relaxation of NSR rules in effect as of 2002 and would be prohibited by SB 288. Moreover, even if air quality within the Bay Area comes back within the NAAQS, that would not necessarily mean that existing regulatory requirements should be eliminated or relaxed. There may still be sound reasons for retaining such requirements, even if the federal NSR requirements no longer technically require them. They may still be required under state law, or they may still be important for achieving other important air quality goals. For these reasons, it would be preferable to address such a situation when and if it occurs. If the District seeks and obtains an attainment re-designation for any criteria pollutant, the District will be in a better position at that time to consider what if any Non-Attainment NSR requirements should be relaxed for that pollutant (and if any relaxation is even allowed under SB 288).

WSPA Comment 14 – Section 2-2-414 Offset Equivalence Demonstration: WSPA requested that the District confirm that the procedure set forth in Section 2-2-414 is only for making an equivalency demonstration, and not for adjusting the amount of emission reduction credits available at the time a banked credit is used to offset emission increases.

Response: This interpretation is correct. The amount of an emission reduction is adjusted at the time it is banked to ensure that only reductions that are “surplus” of existing regulatory requirements are credited. There is no requirement to make any further adjustment at the time it is used.

WSPA Comment 15 – Cumulative Increase Baseline Date: WSPA suggested that the District should add a provision into the definition of “Cumulative Increase Baseline Date” to specify that a “PSD Baseline Date” should be used as the Cumulative Increase Baseline Date instead of the April 5, 1991, Cumulative Increase Baseline Date that applies for all pollutants except PM_{2.5}.

Response: For purposes of calculating a facility’s cumulative increase, the baseline date is April 5, 1991, for all pollutants except PM_{2.5}. For PM_{2.5}, it will be the effective date of the new PM_{2.5} offsets

requirements under the Proposed Amendments. The PSD Baseline Date is a different concept. It is the date used to determine baseline pollutant concentrations on which the PSD increment consumption analysis is performed. The Proposed Amendments will address the confusion that has developed between these two similar terms that are used to describe very different concepts.

WSPA Comment 16 – PM₁₀ Offsets Requirements: WSPA commented that PM₁₀ should be removed from the offsets requirements in Section 2-2-303, and a statement added that offset requirements do not apply for any pollutant for which the District is attainment (or unclassified).

Response: PM₁₀ is currently subject to the offsets requirements, and has been since before 2002. The District is therefore prohibited under SB 288 from relaxing this requirement. District Staff believe that it remains important to regulate PM₁₀ emissions even with the Bay Area’s current “attainment” status, but even if the District wished to remove PM₁₀ offsets requirements it would be prohibited from doing so by SB 288.

WSPA Comment 17 – Additional Impacts Analysis Requirement for GHGs: WSPA suggested that the District clarify in Section 2-2-306 that the Additional Impacts Analysis requirement does not apply “to PSD Projects for GHGs only.”

Response: District Staff responded to a similar comment in the May 25 Background Discussion document regarding the PSD Source Impact Analysis requirement in proposed Section 2-2-305 and whether such analyses must include GHGs. District Staff explained that the PSD requirements in the Proposed Amendments will be implemented according to and following all federal PSD procedures, and that EPA has made clear that PSD Source Impact Analyses are not required to address GHGs. (See May 25 Background Discussion document, at pp. 30-31.) The same guidance document that excludes GHGs from the Source Impact Analysis requirements under the federal program also excludes GHGs from the Additional Impacts Analysis requirements.¹¹ As Section 2-2-306 requires the District to follow all of the federal requirements for conducting the Additional Impacts Analysis, Section 2-2-306 will similarly exclude GHGs from this requirement. The Additional Impacts Analysis requirement in Section 2-2-306 will not apply to GHG emissions.

WSPA Comment 18 – NSR Reform for PSD: WSPA reiterated its earlier comment that the District should adopt the NSR Reform applicability tests for PSD requirements “to remove disincentives that discourage” beneficial improvement projects. WSPA stated that other California air districts have adopted NSR Reform, and that the only reason District Staff have given for not adopting NSR Reform in its entirety is its reliance on “unenforceable limits” and future emissions projections over only 5 years. WSPA stated that the District should at least adopt certain elements of NSR Reform such as the more flexible baseline (the “10-year look-back” provision discussed in connection with previous comments) and the so-called “Demand Growth Exclusion”. WSPA stated that adopting them would “incentivize facility improvements”.

¹¹ PSD and Title V Permitting Guidance for Greenhouse Gases (EPA, March 2011), at Section IV, p. 48, available at www.epa.gov/nsr/ghgdocs/ghgpermittingguidance.pdf.

Response: District Staff responded to earlier comments on this point in Comment No. III.2. in the May 25 Background Discussion document (pp. 24-29), and also discussed them further in Section IV.B.3.g.ii. of the Staff Report (pp. 98-105). As explained there, California law prohibits the District from relaxing its NSR regulations that were in place as of 2002 to incorporate the NSR Reform applicability provisions. This includes the bulk of the NSR program, with the exception of GHGs as that is a new pollutant that was not regulated as of 2002. It is true that other California air districts that do not have PSD requirements have incorporated the federal program by reference, but the Bay Area Air District is in a different position because it does have such provisions in its existing regulations. (These requirements are still binding regulations in the District’s rule book, even though they have never been approved by EPA as effective for federal PSD permitting purposes under the Clean Air Act). For all of these reasons, the District is very limited in the extent to which it can legally incorporate the federal NSR Reform requirements.

With respect to GHGs, the Proposed Amendments do incorporate the more flexible baseline provisions used in NSR Reform, but not the use of “unenforceable limits” as WSPA notes in its comments. As explained in the Background Discussion document and Staff Report, it is important that the applicability of PSD requirements be based on enforceable permit limits, and not simply a facility’s unenforceable projections of what emissions might be. Moreover, as also explained in those documents, District Staff disagree that basing PSD permitting on enforceable permit limits will restrict or prohibit beneficial projects from going forward. If a facility wants to undertake a beneficial improvement project that will reduce emissions, it will not be required to implement any PSD requirements as long as it can commit to not having a significant emissions increase – and as long as it can put its money where its mouth is and make the commitment enforceable through permit conditions and not just a projection of what might occur in the next five years. And even if a facility does not feel comfortable that it can avoid having a significant emissions increase in practice, the only additional PSD requirement for GHGs is to use BACT, which under EPA guidance is simply to use the most energy-efficient equipment that can be justified on cost grounds – which the facility is likely to be going anyway given the fuel and energy savings involved. For all of these reasons, the PSD requirements will not be an unreasonable burden and will not discourage or prevent beneficial improvement projects. (See also the discussion provided in the Staff Report for further detail on this issue.)

With respect to WSPA’s comment about using only certain elements of NSR Reform such as the “ten-year look-back” baseline provision and the Demand Growth Exclusion, the Proposed Amendments do utilize the ten-year look-back for GHGs, but not the Demand Growth Exclusion. The Demand Growth Exclusion is an element of NSR Reform related to the use of unenforceable emissions projections as a basis for permitting, which is problematic for the reasons explained above. The Demand Growth Exclusion is a way of further reducing the projected emissions increase resulting from a project by “excluding” emissions associated with future growth projections. But it suffers from the same basic fault as the use of emissions projections generally – it bases these important PSD permitting requirements on the facility’s unenforceable emissions projections rather than on enforceable permit limits. The result is that when the project is built and actually starts operating, it could result in a significant emissions increase without implementing PSD. This is the kind of result that PSD was created

to avoid, and it would not be appropriate to adopt a regulatory program that allows such a result to occur.

WSPA Comment 19 – NAAQS Protection Requirement: WSPA stated that the proposed NAAQS Protection Requirement in Section 2-2-308 “appear[s] to contradict” the federal NSR program requirements. WSPA explained that the modeling demonstration showing that the source will not contribute to a NAAQS exceedance should not be required for non-attainment pollutants, because if the area is non-attainment then the background concentrations will already be over the NAAQS. Thus, WSPA commented, the modeling exercise would by definition indicate that the source was going to contribute to a NAAQS violation. WSPA expressed a concern that beneficial projects would not be able to be built in areas where the background concentrations are already above the NAAQS. WSPA gave an example of a project to reduce NO_x or GHG emissions that had some increase in PM_{2.5} emissions, and stated that such a project could be prohibited because it was contributing to a PM_{2.5} exceedance.

Response: This comment is similar to comments that District Staff have addressed elsewhere. (See Calpine Comment II.A., CCEEB Comment 1.) As described in more detail there, the proposed NAAQS protection requirement will not impede beneficial projects. There are currently no locations within the Bay Area where background concentrations exceed the NAAQS, and even if there were this would not be an impediment to implementing such projects. Beneficial projects can “net out” of this requirement by using prior emission reduction projects from within the past 5 years to demonstrate that they will not cause a significant net increase in emissions. For projects that are unable to net out, they can show through modeling that they will not have any impact above the “SIL” – i.e., will not cause more than a *de minimis* contribution to any NAAQS exceedance. And even if a project will not be below the SIL, it can obtain emission reductions from other local sources to counteract the effect of its own emissions increases to bring down the overall contribution to acceptable levels. These options will provide facilities with a number of alternatives for satisfying this requirement for beneficial projects.

WSPA Comment 19.a. – NAAQS Protection Requirement: WSPA also raised questions regarding the NAAQS Protection Requirement with respect to the following issues:

- What is the baseline for modeling of non-attainment pollutants?
- What is the process that would be used to model each of the pollutants?
- How would ozone be modeled “on the project level”?
- Can traditional atmospheric models be used for PM_{2.5} modeling, or would models addressing precursors have to be developed? WSPA stated that there is currently not a lot of expertise that has been developed in the latter area.

Response: As discussed in more detail in the Staff Report (Section IV.B.3.a.), per the language of proposed Section 2-2-308, the NAAQS Protection requirement will be implemented using the same procedures applicable to PSD modeling under EPA’s PSD program. The baseline used for such modeling (where a source will have impacts above the SIL and a full impact analysis needs to be conducted) is representative background concentrations in the area where the project will be located. Such existing background concentrations can be obtained by installing monitors at the project location, or by using

data from the District's existing monitoring network where such data are representative of the project location. Existing PM_{2.5} dispersion modeling is used; the modeling would not need to account for how the source's emissions of precursors could combine in the atmosphere given the limitations inherent in current modeling methodologies.

WSPA Comment 20 – Emission Reduction Credit Banking Procedures: WSPA suggested that the District should make the rules for banking emission reduction credits (ERCs) clearer, so that applicants can understand how the amount of creditable emission reductions is calculated.

Response: The Proposed Amendments are designed to specify in more detail how the emission reduction credits are calculated and how the procedures for banking them work. The additional detail being provided will help applicants understand the process. District Staff are also providing further explanation of how the process works in the Staff Report accompanying the Proposed Amendments, and will also be updating the District's permitting handbook to provide additional guidance and explanation.

WSPA Comment 20.a. – “Grace Period” For Determining Baseline Emissions: WSPA stated that the District should add a “grace period” for purposes of determining a source's baseline emissions when calculating the amount of emissions increase or decrease associated with a change being implemented at the source. Currently, for determining the amount of an emissions increase from a modification or the amount of an emission reduction credit in an ERC banking application, the baseline period is measured starting from the date of application (i.e., the baseline period is the three years immediately preceding the date that the application is determined to be complete). WSPA suggested that the District should change this rule to allow applicants to calculate their baseline periods from a date up to 90 days before the date of the application for emissions increases, or up to 2 years before the date of a banking application for banked ERCs. WSPA suggested that allowing such a “grace period” . . . “would incentivize the process, avoid revising baseline emission calculations, and ensure that the District is actively processing the application.” WSPA continued that “[a]s currently written, revised baselines are required and all the work of the application emissions calculations must be redone.”

Response: District Staff disagree that adding a “grace period” into the regulatory language is necessary or appropriate. The District's NSR program has always calculated the baseline period from the date of application, and this date establishes a workable and appropriate cut-off for determining what a source's emissions were before a change is implemented that increases or decreases emissions. WSPA's suggestion of allowing up to 2 years before submission of an application to bank emission reductions would allow facilities to delay submission of banking applications, and as District Staff explained in the Background Discussion document (p. 34, fn. 26) it is important that banking applications be submitted promptly so that the District can review the emissions history and document the amount of emissions involved in a banking certificate. Calculating the baseline period from the date of the banking application ensures that the District will be reviewing recent data when establishing banked emission reduction credits. WSPA's suggested 90-day provision for establishing the baseline for emissions increases for modifications at existing sources is less problematic than the 2-year suggestion for emissions banking, but even this shorter period would undermine the principle that emissions increase

calculations should be based on the source's most recent emissions history. District Staff appreciate WSPA's concern that there could be a time lag between the submission of application materials and the time when the District determines that the application is complete, which could end up changing the effective baseline period from what the applicant assumed in preparing the application. But this concern is better addressed through administrative approaches such as coordination and training between District Staff and facility contacts. This will help facilities to submit applications with all necessary information included and help District Staff be able to make prompt determinations of completeness. Minimizing any lag between the submission of the application and the determination that it is complete is preferable in order to minimize "rework" than providing grace periods that would effectively extend the baseline periods currently allowed under the District's rules.

WSPA Comment 21. – Readability of Language in Section 2-2-603.6: WSPA commented that the language in Section 2-2-603.6 regarding "for purposes of determining whether . . ." was confusing and took several readings to understand. WSPA asked that the District edit this language to make it easier to read.

Response: The final version of the Proposed Amendments has made some edits to address this concern.

WSPA Comment 22. – PM_{2.5}/PM₁₀ Conversion Factors: WSPA noted that District Staff have stated that they will maintain a list of PM₁₀ and PM_{2.5} conversion factors. WSPA asked how long it will take to develop these factors, what data is currently available, and how would the District address conflicting information (e.g., two different sources of information that suggest different conversion factors applicable to the same situation). WSPA also asked whether it can definitively assume that for natural gas combustion sources all of the PM₁₀ is PM_{2.5}, and what reference it can rely on for this point.

Response: There are a number of PM₁₀/PM_{2.5} conversion factors that have been published already, and District Staff anticipate using these as a basis to start compiling a list. Information from source testing of PM sources that shows the breakdown of the PM₁₀ and PM_{2.5} fractions will also provide useful information, and such testing will start becoming much more prevalent now that PM_{2.5} is being specifically regulated. District Staff anticipate that there will be sufficient information to start evaluating PM₁₀ and PM_{2.5} fractions immediately once the Proposed Amendments take effect, and that the list of conversion factors will be continually updated and refined going forward as new and better information becomes available. To the extent that there may be conflicting information on the amount of PM₁₀ or PM_{2.5} emissions associated with a particular source, District Staff will address such a situation in the same way in which they would address any technical situation in which there may be conflicting information: by evaluating all available information and using their best professional engineering judgment. The problem of how to address such a situation is by no means unique to measuring particulate matter emissions. Finally, with respect to the PM₁₀ and PM_{2.5} fractions of the particulate emissions from natural gas combustion sources, a widely-cited reference that the District has used in the past to establish that particulate emissions from natural gas combustion are smaller than 1 micron in diameter is EPA's AP-42 compilation of emission factors, Table 1-4.2, footnote c.

WSPA Comment 23. – Accuracy of Test Methods for Establishing PM_{2.5} Emission Reduction Credits:

WSPA expressed concern about what it says is a “wide variability” and “lack of reproducibility” in source testing results used to measure PM_{2.5} emissions. WSPA stated that it is concerned that attempts to establish the amount of PM_{2.5} emission reduction credits in banking applications could end up being “wrong” (i.e., inaccurate in light of subsequent more accurate information). WSPA asked what recourse there would be if later developments showed that a conversion was not made accurately and should be redone. WSPA also noted that the current banking fees are high and it would be very costly if multiple banking/conversion applications have to be submitted to address this situation. WSPA suggested considering reducing or waiving fees in this situation.

Response: If information comes to light in the future that the amount of emission reductions reflected in PM banking certificates understates the actual amount of emission reductions that occurred when the sources that generated the reductions were shut down, the District can go through a process to revise the certificates to reflect the most accurate information. Indeed, that is exactly what the Proposed Amendments will do. Many existing PM banking certificates reflect an amount of PM emissions reductions that was established looking only at the filterable portion of the emissions. It is now clear that these certificates understate the actual emission reductions involved because they do not account for the amount of condensable PM that is no longer being emitted. The Proposed Amendments set up a process to correct these certificates so that they accurately reflect the correct amount of PM reductions involved. If a similar situation arises again in the future, the District can respond appropriately.¹²

Furthermore, although WSPA has identified this concern with the accuracy of the testing methods available to establish the amount of PM_{2.5} emission reduction credits, WSPA has not identified any potential alternatives that would be preferable to what District Staff are proposing. WSPA does not appear to be suggesting that the District should refuse to adopt NSR regulations for PM_{2.5}, as such regulations are required by EPA’s federal NSR program. Moreover, WSPA does not appear to be suggesting that the District should refuse to allow the use of PM_{2.5} emission reduction credits to comply with the NSR offsets requirements. If the District is going to be implementing NSR for PM_{2.5} and is going to be doing so using PM_{2.5} emission reduction credits, then it is going to have to adopt a mechanism for establishing the amount of PM_{2.5} emission reductions that can be credited when a source is shut down. And that mechanism can only rely on the most accurate current technical information and testing methodologies. District Staff have confidence that these methodologies are sufficiently advanced to allow for accurate determination of PM_{2.5} emissions, but to the extent that they may have any shortcomings, the bottom line is that these are the methodologies that we have at this point. District Staff believe that the Proposed Amendments address this situation in the most appropriate manner possible under the circumstances.

¹² In addition, District Staff acknowledge the suggestion to waive banking fees in the event such a situation arises, but that issue does not need to be decided now. The need for such an adjustment may never actually arise, and in the event that it does the question of what fees (if any) to charge for an adjustment can be better answered at that time.

WSPA Comment 24. – Accuracy of Test Methods for Establishing PM Permit Conditions: WSPA expressed a similar concern in the context of establishing permit conditions. WSPA suggested that the potential for inaccuracies in testing methodologies could lead to permit conditions that are not actually achievable because of testing accuracy problems.

Response: District Staff are confident that the current PM testing methodologies are sufficiently accurate and reliable to use for regulatory purposes. And again, although WSPA may criticize them as unreliable, it does not appear to be suggesting that the District should refuse to implement particulate matter NSR requirements on this ground. If the District is going to implement NSR for particulate matter, then it is going to have to do so using the most reliable current testing methodologies, which is what the Proposed Amendments will do.

Furthermore, the fact that there are limits to the accuracy, precision and reproducibility of test results does not mean that permit limits cannot be established effectively. These shortcomings are inherent in any test method to a certain degree, and they are routinely taken into account in establishing permit limits. Permit limits are established at levels that take into account the amount and quality of the data available to base them on, and at levels that will ensure that the source can comply with them reliably given the variability in the testing methods that will be used to measure compliance. To do so, permitting agencies routinely use a “safety factor” in setting maximum emissions limits to ensure that the source will be able to consistently comply.¹³ The District will be able to do so here to ensure that permit limits for PM emissions will be established at appropriate levels that sources can comply with. And if for some reason it becomes clear in the future that a permit limit was established erroneously, the District can always go back and correct the error based on more accurate information.

WSPA Comment 24.a. – Potential for Delays in PM Permitting: WSPA also expressed concerns over potential delays in the permit application evaluation process as a result of the Proposed Amendments regarding particulate matter. WSPA’s concerns included:

- unavailability of PM_{2.5} and PM₁₀ credits (with condensable emissions specified)
- lengthy time to have PM₁₀ credits converted
- lengthy time to prepare and process permit applications
- Lack of emission factors to convert ERCs
- Lack of emission factors to establish baselines for permitting purposes
- Lack of source test data to develop baselines and calculate future emissions
- variability in source test results for PM
- Compliance issues if PM permit limits are set unrealistically low
- Concerns about the modeling requirement in areas where background is already over the NAAQS.

¹³ For example, EPA has firmly established this principle in establishing BACT limits. As EPA has stated through its Environmental Appeals Board, “we have authorized the use of so-called ‘safety factors’ that take into account test method variability” *In re Prairie State Generating Co.*, PSD Appeal No. 05-05, 13 E.A.D. 1, 54 (EAB Aug. 24, 2006), *aff’d*, *Sierra Club v. EPA*, 499 F.3d 653 (7th Cir. 2007).

- “Need for a multi-pollutant approach when assessing LAER for PM_{2.5} and other pollutants and a lack of experience in that approach”
- “New and untried procedures”
- Concerns about what will happen if PM measurement technology improves and it appears that determinations made based on erroneous measurements need to be revisited – e.g., ERCs, permit limits, etc.

WSPA suggested that these concerns could be addressed by phasing in PM_{2.5} requirements and/or seeking re-designation to attainment for PM_{2.5}. WSPA also suggested that these issues “will need to be carefully addressed and potential solutions developed before the rule goes into effect.”

Response: District staff disagree that having to address PM_{2.5} requirements will unduly delay the permit application review process. District Staff already have a great deal of experience with many of these PM permitting issues based on their long history with implementing PM₁₀ NSR requirements and also their more recent experience with implementing the PM_{2.5} NSR requirements (which the District has been addressing on EPA’s behalf). There will obviously be some new elements under the Proposed Amendments that will have to be addressed, although this will be no different from the situation that arises every time the District updates its permitting rules. District Staff agree that these new elements will need to be addressed to ensure that the District can transition smoothly when the Proposed Amendments take effect. To do so, District Staff plan to update the District’s permitting handbook to reflect the new requirements and conduct thorough training of all staff to ensure that they know how the new requirements will work. District Staff also plan to conduct outreach to the regulated community to ensure that facility contacts understand them as well. In addition, regarding conversion of PM_{2.5} credits, District Staff will propose that the amendments to the emissions banking provisions in Regulation 2, Rule 4 take effect immediately upon adoption, so that the banked ERC conversion process can begin immediately without having to wait for the effective date of the rest of the Proposed Amendments. (See Section IV.E. of the Staff Report for further details.) This will mean that holders of existing banked credits can have the amount of PM_{2.5} credit (and the amount of condensable PM emissions reflected) determined well in advance of the time that they will need to use such banked credits to offset new emissions increases in future permit applications.

WSPA Comment 25. – Regulations in Effect at Time of Application Govern: WSPA suggested that the District specify in rule language in Reg. 2-1 and/or in the Staff Report that permit applications will be evaluated under the regulations in effect at the time of application. WSPA also suggested that the District clarify which provisions in the Proposed Amendments will take effect immediately and which will take effect in the future at the time of EPA SIP approval.

Response: Existing Regulation 2-1-409 provides that the regulations in effect at the time of the permit application govern the processing of the application. This provision will apply to the Proposed Amendments. Permit applications that are submitted before the Proposed Amendments take effect will continue to be processed under the District’s current rules. District Staff have also clarified how they will propose that the Board of Directors establish the effective date of the Proposed Amendments in Section IV.E. of the Staff Report.