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Manager, Bay Area Region & State Safety Issues

VIA ELECTRONIC MAIL

June 25, 2012

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

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

Dear Ms. Lee:

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

WSPA appreciates and acknowledges the effort of the District Staff to craft rule amendments that have the required content to incorporate PM 2.5, PM front/back half emissions, and PSD Delegation from the EPA to the District, and to provide more clarity to District Staff and industry users when utilizing these regulations to guide their industry permitting decisions. The workgroup discussions and information and technology sharing have been very helpful to this process.

Regulation 2-1

Section 2-1-106 Limited Exemption, Accelerated Permitting Program and 2-1-302.2 Permit to Operate, Accelerated Permitting Program

New language added in the most recent draft of the rule would preclude use of the Accelerated Permitting Program if a source is subject to any New Source Performance Standard (NSPS). In the District's Response to Comments (Comment IV.C.8), the District explains that

the reason for this change is to prevent an applicant from starting construction on a project with a Temporary Permit to Operate issued under the Accelerated Permit Program only to find that the project needs design changes to comply with NSPS requirements. As stated on page 45 in the Response to Comments: “It is intended solely to ensure that the applicant has considered the NSPS requirements and does not foresee any potential problems, so that no such problems arise later on after the applicant has begun the project under a Temporary Permit to Operate.”

Most refinery sources are subject to at least one of the NSPS standards which would prevent use of the Accelerated Program for permitting involving those sources. For example, most refinery heaters are subject to NSPS Subpart J and therefore would not be eligible to use the Accelerated Permitting Program to permit a burner replacement under an Alteration Permit. Per discussion with District staff at the Technical Workshop on June 7, this was not the intention of the revised language. Staff agreed to consider alternative language such as requiring a certification that the project being permitted will meet any applicable NSPS standard. As a related matter, in the District’s response to Comment IV.E.2.c.1., the District offered an example of an alteration of “any change defined as a modification or reconstruction under NSPS, even if no emissions increase”. Therefore, it would seem consistent to say that changes to NSPS/NESHAPS sources, even if they trigger a modification or reconstruction under the definition of those rules, may be considered alterations provided that there is no emissions increase, and therefore eligible for accelerated permitting.

The revised accelerated permitting program states that “the APCO shall issue the temporary permit to operate upon determining” that the application contains all of the elements and satisfies the requirements of the program, but the owner/operator may not start construction until “receipt of the temporary permit to operate”. Several days may pass between District issuance of the temporary permit and receipt by the owner/operator while the physical permit is in the mail. These several days may make a large difference to the owner/operator, which is why accelerated permitting has been chosen in the first place. We request that the District always e-mail a copy of the temporary permit to operate to the owner/operator upon issuance (or at least upon request) to prevent unnecessary delays for accelerated permits. In addition, there is no time limit for how long the District can take to determine whether the application contains “all required information” even though the applicant will have certified that to be the case. WSPA suggests that since the Applicant must certify that all of the required elements have been met, the wording in the rule should be changed to clarify that the “APCO shall *promptly* issue the temporary permit to operate...”

Section 2-1-233 Definition of Alter

The revisions made to the definition of Alter in the most recent draft of the rule along with the discussion in the Response to Comments are helpful in clarification of District intent. Adding examples of alterations in the Staff Report will be beneficial for both the regulated community and District permitting staff.

On page 65 of the District’s Response to Comments is a preliminary list of Alteration examples for the Staff Report. The first item under Examples of Alterations That Require Permit Applications is “Burner replacement – identical or equivalent, no increase in maximum firing rate.” An ***identical*** burner replacement is not an Alteration and should not trigger a permit application. This was never the intent of Alteration (see deleted Section 233.1 in the current rule). If it is now the District’s intent to require a permit for identical replacement of any piece of equipment in a facility, this will overwhelm the permitting system without any air quality benefit. Please correct the example or clarify the intent of the Alteration permit.

In the District’s response to comments concerning the rule language which allows imposition of permit conditions in an ATC for an alteration, the District explains that this language only authorizes permit conditions that will keep a change from increasing emissions in a manner that would constitute a modification – i.e. permit conditions to ensure there is no increase in PTE. Including more direct reference to PTE in the language would clarify this purpose. It is recommended that the definition of Alter be amended as follows:

2-1-233 Alter: To make any physical change, change in the method of operation or other similar change at an existing source that may affect air pollutant emissions....The APCO may impose permit conditions in an authority to construct or permit to operate for an alternation to ensure that the change authorized by the authority to construct or permit to operate will not result in *an increase in the source’s PTE triggering* a modification under 2-1-234.

Section 2-1-234 Definition of Modify

The District is soliciting input on incorporating the Federal “Major NSR” test in the definition of Modification to address “observers’ concerns” that the District applicability test may not be as stringent as the Federal applicability test. WSPA would prefer NSR Reform in its totality. We oppose using NSR Reform only as a backstop. In the Response to Comments beginning on page 59, the District convincingly argues that their modification applicability test is at least as stringent as the Federal test. The District conclusion, after detailed evaluation, is that the modification test for applicability in Regulation 2 Rule 1 is at least as stringent and likely more stringent than EPA’s minimum requirements. Based on the District’s own arguments, a Federal backstop provision is not necessary.

Including this backstop for the *possibility* that there is a *potential* issue adds a significant layer of complexity to an already complex rule with no commensurate improvement in air quality. Permit applications and review will take much longer to complete and there will have to be two “sets of books” since the tests are based on different baselines, etc. It is unclear how the District might even write or logistically enforce permit conditions which deal with two different “sets of books”.

In addition, because the backstop would be based on the federal test as it currently exists including NSR Reform rules, District staff and facility personnel will have to maintain expertise on application of these rules as they currently exist. As time goes on, this will get more and more complicated. Imagine a scenario where in the future, EPA relaxes their NSR requirements. The District Board may decide not to amend the District rule to reference the updated version of the EPA rule because of backsliding concerns which would result in application of an outdated rule. The backstop only makes sense if EPA requires it for approval otherwise it only adds significant complexity and confusion with no benefit.

In this section, there is a mistake in the reference to Potential to Emit. The definition of Potential to Emit is found in Regulation 2-1-217 rather than 2-2-217.

One of the tests for a modification is an “Increase in Potential to Emit” (2-1-234.1). “Increase in Potential to Emit” in this section refers to the definition of Potential to Emit in 2-1-217 and includes the wording “in keeping with the following principles” after which follows sections 234.1.1, 234.1.2 and 234.1.3. This new language “in keeping with the following principles” appears to add unneeded uncertainty to everything that follows and does not provide the clarity or certainty needed for the regulated community.

On a different subject, the definition of modify, as it is currently written, imposes an increase of “physical capacity” test (2-1-234.3.2) only on “sources that have never been issued a District authority to Construct and that do not have conditions limiting daily or annual emissions”. Under the current rule, the test of whether a modification has occurred at sources that have emissions limits in a District authority to construct (2-1-234.1) or have emissions limits in a permit to operate or Title V permit (2-1-234.2) is to determine if the emissions (or production rate or capacity used to estimate emissions) have been increased above the limits approved in those documents. The tests for a modification in 2-1-234.1 and 2 do not consider increases in physical capacity to be modifications provided that the approved limits are not exceeded.

However, the District’s proposed definition of “modify” does not apply the same test. Instead, the District applies a PTE to PTE test for all sources, and in 2-1-234.1.2 states that where a source cannot fully operate to a legally enforceable limit, “the source’s potential to emit shall be determined by the source’s actual physical ability to emit air pollution”. This expansion of the “increase in physical capacity” test to all sources will result in some projects being considered modified under the District’s proposed definition which would not be considered modified under the District’s present definition.

As an example, consider a new source, permitted and constructed in 2010, which has daily and annual emissions limits based on design capacity. This hypothetical source has emissions >10 lbs per day and toxic air contaminants that are below the trigger level when the source is operating at 100% of the approved emissions limits. Due to an error in construction (wrong valve installed, incorrect metallurgy installed, unforeseen fouling, etc.), the source can

only physically operate at 98% of its design capacity. A project is proposed during a planned shutdown in 2012 to correct the problem which would allow the source to operate at 100% of design capacity (and therefore 100% of its permit limit).

Under the District's current definition of modification, this project could not be considered a modification because it is not increasing emissions above any limitation in either its authority to construct or permit to operate, and 2-1-234.3 and 2-1-234.4 do not apply. However, the District's proposed regulation would consider this a modification because the future potential to emit is greater than the current potential to emit (because the source cannot physically operate to the full extent of its legally enforceable limitation). This would require the source to undergo a new BACT determination because there is no significance threshold for a modification, and BACT is required on any modified source with PTE of greater than 10 lbs per day.

This would result in a disincentive for the operator of the source to pursue the project because of the potential for triggering BACT (again). However, the environmental benefit of such a stringent requirement is quite small because 1) the hypothetical source has already undergone a BACT evaluation in 2010 and implemented very recent BACT, and 2) the Air District has already evaluated the full impact of the source's permitted emissions in issuing the permit, and in its review of this project (by describing it as a modification) the District would be re-evaluating the impact of emissions that it has already given the source permission to emit.

Therefore, it would seem that the District's new definition of "modify", by defining PTE as present-day operating capacity for all sources regardless of whether they already have been approved for higher capacity, imposes new disincentives for facilities to improve their equipment that are not present in the Air District's rules today.

If the District insists upon proceeding with this new definition of modify, WSPA requests that the Air District consider an exemption from BACT for sources which have installed BACT in the previous 5 years. The impact of this exemption on Air Quality would only be minor because the District imposes very stringent BACT, and therefore the reduction in emissions between two BACT determinations made only a few years apart is likely to be very small, while the cost to facilities may be disproportionately large for the potential environmental benefit.

Regulation 2-1-234.1.2 Modify

In Section 2-1-234.1.2, add the following language:

For sources whose emissions are not limited by any legally enforceable limitation (or that cannot physically operate to the full extent of such limitation), the source's potential to emit shall be determined by the source's actual physical ability to emit air pollution. A source's potential to emit shall be determined by the most relevant and reliable technical information available regarding the source's operation, which may include design

information, engineering specifications, or other information. Hourly design or engineering information may be multiplied by 24 to determine daily potential to emit and the daily potential to emit may be multiplied by 365 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. A source's potential to emit shall take into account any limitation on the effective capacity of the source as a result of the capacity of any upstream or downstream process that acts as a "bottleneck" (i.e., a limit on the ability of the source to operate at maximum capacity).

This language is particularly important since many sources, such as boilers and furnaces, have design or engineering rates based on MMBtu per hour.

Since the District is proposing to change the definition of "modify" in this very fundamental way but it is unclear when the rule change will become effective, it is going to become difficult for facilities to understand which definition of "modify" applies to projects which span the late 2012 to early 2013 time frame. While we agree with the District's goal to avoid creating a SIP gap by having a rule effective date that is different than EPA's approval of this rule, an unknown effective date for this rule will only add uncertainty for facilities planning projects over the next 3-9 months.

Regulation 2-1-241 PM2.5

The proposed BAAQMD definition should be corrected to be identical to the EPA definition. Otherwise, there is the potential for confusion and misinterpretation.

Reg. 2-1-242 Support Facility

On page 50 of the District's written comments dated May 25, 2012, the District solicited input on whether to include an element in the Support Facility definition in 2-1-242 requiring that 50% of a support facility's output or services be dedicated to the principal facility for this 'Support Facility' relationship to exist.

WSPA agrees with the District that a hard line rule, such as the 50% test, should not be included in the rule because it may have unintended consequences. We think a test of reasonableness should be included in the rule language to more transparently define the intent of the support facility relationship. This would help to exclude the requirement for facilities that have only minor relationship to the main facility for inclusion in the 'cumulative increase' calculation for permitting purposes, and simplify the permitting process. The Support Facility requires a strong relationship to the main facility. As such, it is recommended that the proposed definition of Support Facility is amended as follows:

2-1-242 Support Facility:

A facility that conveys, stores, or otherwise significantly assists in the production of the principal product of another facility. Per Section 2-1-213, a support facility is considered part of the principal facility that it supports for permitting purposes under Regulation 2.

Regulation 2-2

At the first rule development workshop in February, the District stated that their intent was to incorporate the new requirements for the National Ambient Air Quality Standard (NAAQS) for NO₂ (1-hour) and PM_{2.5} (24-hour and annual), Greenhouse Gas (GHG) Prevention of Significant Deterioration (PSD) review, and Title V GHG permitting requirements. In addition the District stated that they were reorganizing the permitting rules to make them easier to read and adding clarifying language to “further detail the procedure of determining a modified source and the calculation of emission increases.” In this second draft, additional new requirements are proposed that are new both to this draft and new to District permitting. Clearly, the proposed amendments go far beyond clarifications or changes necessary to obtain PSD delegation.

New and Complex Requirements Proposed Rather than Clarifications

The new and or edited requirements, as currently presented, clearly add many levels of complexity and require many new or expanded analyses. For example, with the currently proposed language, an applicant must assess three different baseline periods and evaluate both future actual emissions and future potential-to-emit emissions in order for a facility to determine whether a project is a modification and whether PSD is applicable. These added requirements may or may not be the best way to meet the concerns of the agencies and the stakeholders; but, the proposed requirements definitely increase the work and the time necessary to submit and evaluate applications.

Review Workflow, Streamline Rules and Simplify Rule Language

While the District has carefully written the requirements in their proposed rule, there has not been time to evaluate how the permitting process will change in order to encompass the new complex requirements. WSPA requests that the District prepare an evaluation of the effects of the rule language on the permitting process. Can the new requirements, as written, be incorporated in a practical, streamlined manner into the permitting process? While it may not be possible to “Beta Test” the new rules, WSPA believes that additional analysis on the implementation of the rules should be conducted before the amendments are adopted.

WSPA requests that the District develop and present workflow process diagrams that encompass the new rules and layout the future permitting process for each pollutant. These workflow diagrams would be needed for the requirements in Regulations 2-1, 2-2 and 2-4. These diagrams would help both the District and stakeholders understand the actual work that

will be needed for the stakeholder to prepare an application and for the District to prepare the engineering evaluation. Perhaps by developing these diagrams, overlapping requirements can be identified so that the work flow process, and subsequently, the rules could be simplified. It would also be a test whether the language as written is what the District intended.

Review Timelines and Address Potential Delays/Cancellations of Projects in District

In conjunction with the work flow process diagrams, WSPA requests that the District prepare timelines for permitting, engineering evaluation and approvals. The rules, as proposed, will add significant time to the process. The development of the diagrams and timelines may reveal opportunities for streamlining the requirements and reducing the time to obtain permits. The time it takes to obtain Authority to Construct permits is a critical issue for California. California has mandated reductions in greenhouse gas emissions, has promoted increased utilization of green energy, and has targeted improvements to the state economy by attracting green industry to the state. Producing clean hydrogen fuels and manufacturing solar panels are very intense manufacturing processes that would require air permitting. It would also be unfortunate if the District rules create further delays in reducing emissions or creating green jobs.

At refineries, timing is also critical in that most projects will need to be implemented during planned maintenance outages that may only occur every 3 years or longer. Currently, facilities are allowed to use NSR Reform PSD and work with the EPA expeditiously if actual emissions are insignificantly increased in a project. The District's proposal to get SIP approval of the rule using pre-NSR Reform will result in lengthy PSD permitting for projects that have insignificant actual increases. The increased time for obtaining a PSD permit may result in cancellation of an environmentally beneficial project. Several examples of environmentally beneficial projects that could be delayed or cancelled due to the proposed complexity of the BAAQMD rules are presented in Attachment 1.

Address Achievability of Compliance with Rule as Proposed

It would be unfortunate if the District rules are revised such that facilities would be unable to comply with the permitting requirements in the Bay Area. One possible repercussion could be that companies would choose to improve existing facilities out of the District or state rather than existing Bay Area facilities. Or a company may choose to locate new facilities out of the district or state. Another repercussion could be a situation where sufficient PM2.5 offsets are not available on the market 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.

California's aggressive Cap and Trade program requires that energy efficiency projects be implemented as readily as possible in order to achieve the GHG reduction goals of the state. Projects that reduce GHGs may be accompanied by decreases or increases in criteria pollutants. Therefore, under the proposed District amendments to Regulation 2, additional requirements including "pre-NSR Reform" PSD may add construction delays or prohibit a project from being

permitted. Within the NSR scope of the proposed rules, not only must the “no net increase” provisions of NSR be achieved, new modeling analyses are proposed. The modeling may prohibit new or modified sources from being permitted since by definition non-attainment areas already have background levels that exceed the NAAQS.

Multi-Pollutant and Other Benefits

The BAAQMD evaluated and acknowledges the importance of a multi-pollutant evaluation method (MPEM). However, this approach is not encompassed in the proposed amendments to Regulation 2. The proposed regulations are rigid with no room for the flexibility of an MPEM approach. The District has stated that it considers NO_x reductions very important and in some cases relaxes CO requirements to obtain more NO_x reductions. However, the rules as proposed would not allow for such flexibility.

An environmentally beneficial project that significantly reduce some pollutants while slightly increasing other pollutants may be prohibited or cancelled because of non-attainment pollutant modeling or because of Lowest Achievable Emission Reductions (LAER) controls that are achieved in practice for a prior permitted source, but are not cost-effective for a different facility’s specific project. It may seem to the District that prohibiting or cancelling these projects is appropriate. The problem is that in cancelling these projects, the air quality remains status quo and the potential air quality benefits with real pollutant emission reductions is not realized.

EPA acknowledged this in their assessment of New Source Review Reform and WSPA supports and agrees with EPA’s reasons for changing the NSR rules to an actual-to-projected-actual applicability test for existing and replacement units. The excerpt below is from the Technical Support Document for the Prevention of Significant Deterioration (PSD) and Non-Attainment Area New Source Review (NSR) Reconsideration, EPA-456/R-03-005, October 30, 2003.

... we (EPA) believe that the environment will not be adversely affected by these changes and in some respects will benefit from these changes. The new test will remove disincentives that discourage sources from making the types of changes that improve operating efficiency, implement pollution prevention projects, and result in other environmentally beneficial changes. Moreover, the end result is that State and local reviewing authorities can appropriately focus their limited resources on those activities that could cause a real and significant increase in pollution. 67 FR 251

Attainment Designation

Since the District has not proposed to remove attainment pollutants from the District BACT Pollutant definition (Regulation 2-2-210), which is really Lowest Achievable Emission Reductions (LAER), some pollutants will be evaluated for both PSD and NSR. This does not seem to be the intent of the federal programs.

The Sacramento Metropolitan Air Quality Management District (SMAQMD) received approval of their *Rule 214 - Federal New Source Review and Rule 203 – Prevention of Deterioration* from both ARB and EPA. The SMAQMD removed provisions applicable to CO as a non-attainment pollutant because the District is now classified as attainment for that pollutant. SMAQMD added provisions into their rules to eliminate requirements applicable to PM10 emissions upon EPA designation of the air basin as attainment for PM10.

Since this precedence has been established, WSPA requests that the District remove the provisions applicable to CO and PM10 as a non-attainment pollutant because the District is now classified as attainment for these pollutants. The provisions to be removed include, but are not limited to Regulation 2-2-210 and 2-2-303.

As stated above, the SMACQD NSR rule removed provisions applicable to CO as a non-attainment pollutant because the District is now classified as attainment for that pollutant. SMAQMD added provisions into their rules to eliminate requirements applicable to PM10 emissions upon EPA designation of the air basin as attainment for PM10. WSPA believes that this approach should be feasible for the BAAQMD. Therefore, CO and PM10 should be removed from the District BACT Pollutant definition and a statement added that the non-attainment provisions of Regulation 2-2 do not apply to any regulated air pollutant or precursors to that pollutant that the District has been designated or re-designated as attainment or is unclassified for the federal National Ambient Air Quality Standard as codified in 40 CFR 81.305.

WSPA encourages the District to pursue re-designation of PM2.5 as an attainment pollutant. If in fact, the District is attainment for that pollutant, the rules should reflect the correct status. WSPA recommends that the District add provisions into Regulation 2-2 to eliminate requirements applicable to PM2.5 emissions upon EPA designation of the air basin as attainment for PM2.5. If reclassification is not obtained due to actual air quality, then the provisions would not result in any change and there would be no repercussions from the inclusion of the language in the rule. An alternative is to identify that the non-attainment provisions of Regulation 2-2 do not apply to any regulated air pollutant, or precursors to that pollutant, that the District has been designated or re-designated as attainment or is unclassified for the federal National Ambient Air Quality Standard as codified in 40 CFR 81.305.

Regulation 2-2-201 Adjustment to Emissions Reductions

The Background Discussion for Second Draft of Proposed Amendments had a lengthy discussion on no RACT adjusting Emission Reduction Credits at the time of use. Please confirm that the procedure described here is used only for the equivalence demonstration in 2-2-412 and not for RACT adjusting at the time an ERC is used in the District.

Regulation 2-2-209 Cumulative Increase Baseline Date

In reorganization, it appears that part of the definition currently in the rule was omitted in the proposed rule language. The data for pollutants other than PM_{2.5} should be April 5, 1991, unless a PSD Baseline Date is applicable. The proposed language should be the following:

Cumulative Increase Baseline Date: April 5, 1991 (unless a PSD Baseline Date is applicable), for all pollutants except PM_{2.5}, and [effective date of revised regulation] for PM_{2.5}.

Regulation 2-2-303 Offset Requirements, PM_{2.5}, PM₁₀ and Sulfur Dioxide

PM₁₀ should be removed from this section and a statement added that the non-attainment provisions of Regulation 2-2 do not apply to any regulated air pollutant or precursors to that pollutant that the District has been designated or re-designated as attainment or is unclassified for the federal National Ambient Air Quality Standard as codified in 40 CFR 81.305.

Regulation 2-2-306 PSD Additional Impacts Analysis Requirements

Add clarification that this section does not apply to PSD Projects for GHGs only.

Regulation 2-2-304 through 2-2-307 PSD

WSPA continues to assert that the NSR Reform program is more appropriate than pre-NSR Reform in order to remove disincentives that discourage sources from making the types of changes that improve operating efficiency, implement pollution prevention projects, and result in other environmentally beneficial changes. This is particularly important in California. Other Districts in California have adopted NSR Reform. The only objection to NSR Reform that the District has raised is its dislike of unenforceable limits and the tracking of future actual emissions for only 5 years.

WSPA believes, and would like to discuss with the District, possible additional requirements to NSR Reform that would satisfy the District's concerns, but would allow most elements of the program to remain intact. The baselines of two year in ten years and the Demand Growth Exclusion are two examples of NSR Reform that WSPA believes would incentivize facility improvements, new growth of green industry and green energy, and result in environmentally beneficial changes in the District.

Regulation 2-2-308 Non-PSD Significant Source Impact Analysis Requirement

These modeling requirements appear to contradict the federal and BAAQMD NSR program, which requires "no net increase" for non-attainment pollutants. LAER and offsets are provided because the region cannot attain the National Ambient Air Quality Standards (NAAQS) for a pollutant. Modeling for non-attainment pollutants would typically fail because the

background for the pollutants already exceeds the NAAQS. Some concerns include the following:

- What would be the baseline for the modeling for non-attainment pollutants?
- Please explain the process that one would use to model each of the pollutants
- How is ozone modeling to be conducted on the project level?
- Can traditional atmospheric models be used for PM_{2.5} modeling or have models that address precursors and PM_{2.5} formation been developed? Only limited expertise in that area would be available.

If the PM_{2.5} or other non-attainment modeling exceeds the thresholds, this could prevent a project from going forward. The project could be to reduce NO_x or GHGs, but the multi-pollutant impact could result in PM_{2.5} increases. If a project could not go forward because of non-attainment modeling, real reductions in other pollutants may not be possible to achieve.

Regulation 2-2-603.1 Baseline Emissions Calculation Procedure

We understand that the District is interested in providing more clarity in the rules to guide calculations relating to emissions calculations. We also understand that the District is interested in having facilities submit ERC applications as soon as practical. This simplifies emissions calculation reviews, and provides a clearer inventory of ERC's available district-wide. However, the proposed rule amendments still do not provide sufficient clarity nor practical timelines to minimize rework both by the applicant and the District when calculating emissions and submitting ERC applications. We request additional clarity in the proposed rule amendments to guide the applicant towards timely and accurate one time calculations of emissions for applications.

WSPA believes the District should add a 90 day grace period to the baseline emissions calculation date. Providing a 90 day grace period to the baseline emissions calculation date would incentivize the process, avoid revising baseline emission calculations, and ensure that the District is actively processing the application. As currently written, revised baselines are required and all the work of the application emissions calculations must be redone. The 90 day period would provide an opportunity that the work would be done only once. Typically 90 days would not substantially change the emissions calculation results.

There are two scenarios for which an ERC banking application can be requested:

1. Permanent shut down of an existing source with no replacement. In this case, the application to surrender the PTO and the application to obtain the ERC would be the same.
2. Shut down old source and replace it with a new source (modernization). The analysis for contemporaneous emissions reduction credits and offsets required is documented and supported by the District's Engineering Evaluation Report for that project.

- a. ATC Emissions Baseline is defined by NSR. When the permit to construct the replacement unit is submitted, the permit emissions limit is not yet known.
- b. ERC Emissions Baseline is performance prior to the shutdown of the retired source.

We request additional clarity in the proposed rule amendments to guide the applicant towards timely and accurate one time calculations of emissions for applicable applications.

2-2-603 Baseline Emissions Calculation Procedures: The following methodology shall be used to determine a source's baseline emissions for purposes of calculating an emissions increase or decrease from a source under Sections 2-2-604.2, 2-2-605.3, and 2-2-606.1:

603.1 Determine Baseline Period Ending Date: The date on which the baseline period ends is determined as follows:

1.1 For determining the amount of an emissions increase from a new or modified source, the baseline period ends on the date on which the application for authority to construct for a new source or a /permit to operate for a the new or modified source is determined to be complete. The baseline emissions calculation is valid for up to 90 days prior to an application being determined to be complete.

1.2 For determining the amount of a contemporaneous emissions increase under Section 2-2-220 for a physical change or change in the method of operation of a source that was not a modification of the source, the baseline period ends on the date the change was first implemented at the source.

1.3 For determining the amount of a contemporaneous onsite emission reduction credit or a contemporaneous emissions decrease under Section 2-2-220, the baseline period ends on the date on which the emission reduction becomes enforceable.

1.4 For determining the amount of an emission reduction credit for which a banking certificate is sought under Regulation 2, Rule 4 for a shut down source or for reduced emissions limit on an existing source, the baseline period ends the date on which the emissions reduction becomes enforceable. banking application is determined to be complete. The banking application must be submitted within 2 years of when the emissions reduction becomes enforceable.

Regulation 2-2-603.6 Determine Adjusted Baseline Emissions Rate

There is a sentence that was edited improperly – “for purposes of with determining whether”. After several readings, the content of the paragraph is correct. If possible, edit the paragraph to make it easier to read.

Regulation 2-4

Regulation 2-4-602 Calculation Procedure for Converting Filterable PM10 to Filterable PM2.5

The BAAQMD states that they will maintain a list of PM10 to PM2.5 conversion factors in the Permit Handbook. How long will it take to develop these factors? What data is currently available? How would we address published scientific sources that contradict each other? Is it definitive that for gaseous combustion sources, the total PM10 equals PM2.5 and what would be the reference for this?

Regulation 2-4-603 Calculation Procedure for Including Condensable PM10 or PM2.5

Given the limited published data and limited source test data for PM2.5, WSPA is concerned that the initial attempts to calculate PM2.5 for banking applications could be highly erroneous. Avogadro Group attested to the wide variability in the results of the source test methods and the lack of reproducibility. This suggests that the District and the stakeholders could get it “wrong” in the first applications for banking PM2.5 and even PM10. What recourse is there to update credit values, as the science and tests improve? It would be very costly if new banking applications have to be provided multiple times as the science moves from its infancy into practical applied science.

The BAAQMD fees for banking are very high. These fees have rendered many real, but small to medium, quantities of reductions in emissions to go unbanked because it is not cost-effective to submit the banking applications. Consider reducing or waiving fees if a holder would like to revise an ERC value based on subsequent improvement in testing, emission factors or calculation methodologies.

PM2.5 and Permitting Concerns

The wide variability in the results of the source test methods and the lack of reproducibility suggests that the District and the stakeholders could erroneously calculate PM2.5 and PM10 emissions with condensables. This could potentially lead to establishing incorrect permit limits. There may be significant compliance issues when new limits cannot be achieved because of the lack of reproducibility in the source test methodology. Has the BAAQMD addressed the procedures and processes to address these very real concerns? Being proactive and anticipating this outcome could assist both the District and the stakeholders in keeping the stakeholder operations in compliance during this initiation period.

WSPA suggests that the District map or diagram the process and the timeline for permitting a project with an increase in PM10/PM2.5. WSPA has concerns that the submittal of applications and the issuance of permits may grind to a halt once this rule is adopted. While the WSPA members strive not to increase PM10 or PM2.5 in projects, an increase may result as a

co-pollutant to a NO_x or GHG reduction project. Also, in permitting PM₁₀ and PM_{2.5} increases may not be real or actual increases; but an artifice of the calculation methodology using the District's prescribed baseline and potential to emit. The major concerns are the following:

- Unavailability of PM_{2.5} and PM₁₀ (with condensables) Emission Reduction Credits (ERCs)
- Lengthy time in the process to have PM₁₀ ERCs converted to PM₁₀ and PM_{2.5}
- Lengthy time to prepare and process permit applications
- Lack of emission factors to convert ERCs
- Lack of emission factors to establish permit emission baselines and future emissions
- Lack of source test data to develop emission calculations for baseline and future emissions
- Extreme variability in source test results that has been documented by source testers
- Lack of reproducibility in PM₁₀ and PM_{2.5} source test results
- Compliance issues that may arise if PM_{2.5} and PM₁₀ emission limits are set unrealistically low in permit conditions
- Inability to achieve NAAQS in modeling a project because the background at the local monitoring stations is already near or above the NAAQS
- Need for a multi-pollutant approach when assessing LAER for PM_{2.5} and other pollutants and lack of experience in that approach
- New and untried procedures
- Need to have proactive flexible measures in place to implement improvements in initial calculations and test methods/results, corrections to ERC values, changes in permit limits, etc. as the science of PM₁₀ air emissions evolves.

Some of these concerns could be addressed by phasing in the non-attainment program for PM_{2.5} and actively pursuing re-designation to attainment. Other issues will need to be carefully addressed and potential solutions developed before the rule goes into effect.

All Regulation 2 Requirements

To eliminate unintended consequences of the timing of the approval of the proposed rule amendments as they pertain to submittal of applications outlined in Reg 2-1 and 2-2, 2-4 or 2-6, we recommend that language is included in Reg. 2-1 affirming that an application that was submitted prior to the proposed rule amendment adoption and approval by the EPA will continue to be guided by the pre-rule amendment adoption rule language. For projects that do not require a permit application under the pre-rule amendment adoption rule language, applicability will be guided by the date the project commences construction. Alternately, comments can be explicitly included in the Staff Report on this same topic. This will remove any uncertainty by both the facility submitting the application and when preparing supporting documentation required for complete review by the Permit Engineer, as well as by the District Permit Engineer when reviewing the application and supporting documentation to determine application completeness. This resolution will minimize rework and reassessment analysis. With simple permits, there should be little effect. However, with permits involving more significant changes involving complex documentation requirements, there is likely to be additional rework and other

unintended results. Additionally, we ask that the District clarify which requirements will be in effect upon adoption of the rule by the District and which requirements will be future-effective based on EPA SIP approval.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Guy Bjerke". The signature is fluid and cursive, with the first name "Guy" and last name "Bjerke" clearly distinguishable.

Guy Bjerke
Manager, Bay Area Region & State Safety Issues

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

Attachment 1

Examples of Environmentally Beneficial Projects and PSD Applicability

Under the BAAQMD's proposed rule, the emission increase calculation procedure for changes at existing sources is defined in proposed Rule 2-2-604.2. The emission increase is calculated as the difference between the source's potential to emit after the change and the adjusted baseline emissions before the change. As a result of using potential to emit to represent future emissions from the source, many environmentally beneficial projects will be required to be permitted as PSD Projects as defined in the proposed BAAQMD rules. General examples of environmentally beneficial projects at refineries are those where contaminants (e.g., sulfur, benzene) are reduced in the products or in the fuel gases that are combusted on-site. More specific examples include the following:

1. A replacement of low-NOx burners with ultra-low NOx burners in a large furnace would be an alteration with no increase in capacity or in emissions of criteria or toxics pollutants above the existing permit limit and capacity. The NOx emissions from the furnace would decrease as the result of the burner change. While these emission reduction projects typically would not require federal PSD review since the project does not result in an emission increase, the BAAQMD has required PSD analysis for these types of projects in the past. Using the federal NSR methodology for determining baseline and calculating future actual emissions, the CO₂e threshold is likely not triggered. However, using the proposed BAAQMD 3 year actual emissions baseline and pre-NSR reform methodology to calculate PTE, the PSD threshold of 75,000 tons CO₂e is triggered. If the CO₂e threshold is triggered, the project would at a minimum require BACT for greenhouse gases. Given 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.
2. An energy efficiency project is proposed that replaces steam in a heat exchanger with a hot process stream. The project reduces actual steam requirements and actual firing in a boiler. In addition, it reduces firing in another process furnace. While these emission reduction projects typically would not require federal PSD review since the project does not result in an emission increase, the BAAQMD has required PSD

analysis for these types of projects in the past. Using the federal NSR methodology for determining baseline and calculating future actual emissions for the boiler and furnace, the CO₂e threshold likely is not triggered. Using the proposed BAAQMD's 3 year actual emissions baseline and pre-NSR reform, methodology to calculate PTE, the PSD threshold of 75,000 tons CO₂e and the 40 tons per year NO₂ PSD threshold is likely triggered.

Therefore, an environmentally beneficial project that reduces GHGs and other criteria and toxic emissions will require BACT for GHG, BACT for NO₂ (NO_x), ambient air quality modeling for NO₂ and a Class I area analysis. Given the additional costs and timing to obtain a PSD permit; the project would likely be cancelled.

3. Installation of a new/modified clean fuels unit or increases in sour water stripping capabilities at refineries decrease product emissions but inherently require thermal energy in the form of plant steam to accommodate these projects. Steam is typically supplied by one or multiple large boilers located at the refinery, and may be operated at rates much less than the maximum rated capacity. If the difference between the baseline and potential to emit is approximately 140 MMBtu/hr or greater (dependent on fuel gas characteristics), the project would be considered a PSD Project as a result of a significant emission increase in GHGs (>75,000 tpy CO₂e). Considering that total boiler capacity at refineries can be on the order of 1,000 MMBtu/hr in total capacity, most projects affecting steam demand would be expected to be considered a PSD Project if the proposed BAAQMD methodology is used. Delays through the PSD process could result in delays in implementing the clean fuels or source water stripping improvement projects. Additionally, the same boiler would likely be undergoing PSD applications multiple times as new steam increasing/reducing projects are proposed. As energy improvement projects are implemented the boilers actual emissions go down widening the gap between baseline and PTE.
4. Installation of improvements to fuel desulfurization equipment for clean fuels projects may increase sulfur feed to the Sulfur Recovery Unit (SRU). SRU's are sources of SO₂ emissions from refineries and may be operated at actual emission rates well

- below the potential to emit. Most increases in sulfur feed to the SRU are expected to be environmentally beneficial overall since sulfur is recovered as a solid product at a high efficiency rather than directly combusted and emitted as SO₂ from cars, trucks, and other engines. The rules as proposed will require use of potential to emit to represent future emissions, therefore any project affecting the SRU where baseline actual emissions are 40 tpy less than the potential to emit will be considered a PSD Project even if the project substantially reduces secondary SO₂ emissions. Note that SO₂ is also an NSR pollutant under BAAQMD NSR rules, so BACT and offsets would already be required without going through the PSD process.
5. Installation of emission control technologies for one pollutant can result in increases in emissions of other pollutants. Examples include: 1) installing SCR or SNCR on combustion sources and the resulting increase in condensable PM emissions, 2) low NO_x burners and the resulting increase in CO emissions, or 3) sorbent injection for control of SO₂ or mercury emissions and the resulting increase in PM emissions. While these projects would also result in calculated actual emission increases under federal PSD applicability calculation methodology, the magnitude of the emission increase will be larger when forced to consider potential to emit.