BAY AREA AIR QUALITY MANAGEMENT DISTRICT

STAFF REPORT

FOR

PROPOSED

TECHNICAL AND ADMINISTRATIVE AMENDMENTS

TO

NEW SOURCE REVIEW AND TITLE V PERMIT PROGRAMS

Regulation 2, Rule 1 (Permits – General Requirements)
Regulation 2, Rule 2 (Permits – New Source Review)
Regulation 2, Rule 4 (Permits – Emissions Banking)
and
Regulation 2, Rule 6 (Permits – Major Facility Review)





October 2017

[Incorporating Revisions to Earlier Version Issued August 2017]

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I. EXECUTIVE SUMMARY

Staff of the Bay Area Air Quality Management District (Air District or District) are proposing a number of technical and administrative amendments to two important Air District permitting programs, the "New Source Review" pre-construction permit program and the Title V "Major Facility Review" operating permit program. These amendments are necessary to make certain revisions required by the U.S. Environmental Protection Agency (EPA) so that EPA can fully approve the Air District's programs under the Clean Air Act. The amendments will also make revisions identified by Air District staff to help the programs function more effectively, and will revise the District's regulations to align them with a recent Clean Air Act ruling by the U.S. Supreme Court.

The Air District's New Source Review (NSR) program is a comprehensive air permitting program that applies to stationary-source facilities within the District's jurisdiction. The NSR program is the Air District's principal substantive permitting program, applying to a wide variety of stationary-source facilities throughout the Bay Area. Whenever a facility wants to install a new source of air emissions or make a modification to an existing source, the NSR program requires the facility to obtain a permit and implement state-of-the-art air pollution control technology to limit the source's emissions. NSR is a pre-construction permitting requirement, meaning that the facility is required to obtain its NSR permit before it can begin work on the new source or modification.

The Air District's Title V Major Facility Review (Title V) program requires "major" facilities – those with emissions of over 10, 25, or 100 tons per year, depending on the pollutant – to obtain operating permits. The Title V operating permit does not impose any additional substantive requirements on these facilities to limit their emissions. Instead, the purpose of the Title V permit is to collect all of the substantive emissions control requirements applicable to the facility under District, state and federal permits and regulations into one comprehensive document, which improves the transparency and enforceability of the regulatory requirements for these complex "major" facilities.

The Air District updated its NSR and Title V regulations most recently in December of 2012. Since that time, there have been three developments that have given rise to a need to make further revisions:

- EPA has approved (or is in the process of approving) the Air District's 2012 revisions as satisfying the requirements of the federal Clean Air Act, with the exception of 13 identified "deficiencies." The District needs to make certain revisions to address these deficiency items so that EPA can fully approve the District's NSR program.

- In addition, Air District Staff have gained further experience in working with the 2012 updates since they were adopted, and have identified certain areas where additional revisions and clarifications are needed to ensure that the NSR program functions as effectively as possible.
- Finally, in 2014 the U.S. Supreme Court issued a ruling in *Utility Air Regulatory Group v. EPA* (134 S.Ct. 2427 (2014)) that interpreted several relevant provisions of the federal Clean Air Act regarding the Act's NSR and Title V program requirements. The Air District needs to make certain revisions to align the District's regulations with the Supreme Court's ruling.

Although these necessary changes are relatively minor, and are mostly technical and administrative in nature, they are important to ensure that the Air District's NSR and Title V programs function properly from a legal standpoint. The need for these revisions, and exactly what they would involve, are discussed in more detail in the subsequent sections of this Staff Report.

Air District staff also considered two other more substantive changes to the NSR program during the rule development process, but are not proposing action on those issues at this time. The first substantive change was a provision designed to enhance enforcement of the District's NSR requirements in situations where petroleum refineries change the type of crude oil that they process – what is known as the refinery's "crude slate." The Air District committed to addressing this issue under Control Measure SS9 in the 2017 Clean Air Plan, *Spare the Air, Cool the Climate*. District staff are deferring finalizing a proposal on this measure at this time, in order to allow staff to collect additional information on refinery crude slates and how crude slate changes may affect emissions. Staff are proposing that the Board of Directors adopt the proposed technical and administrative amendments now in order to meet EPA's deadline for making those changes, and then address the provision covering refinery crude slate changes when staff have had more time to assess the data being collected under Regulation 12, Rule 15, the Petroleum Refining Emissions Tracking Rule, in order to develop a carefully-considered final proposal.

The second substantive change was a proposal to expand the scope of the Air District's existing requirement that facilities use the "Best Available Control Technology" to reduce greenhouse gas emissions from new and modified sources. The Air District committed to revising this requirement under Control Measure SS17 in the 2017 Clean Air Plan. However, recent legislation has restricted the District's legal authority to impose regulatory limits on CO_2 emissions from sources subject to the state's Cap and Trade program. This legislative action has effectively prohibited the Air District from moving forward with this measure as contemplated in Control Measure SS17 – although the Air

District will continue to consider possible alternative approaches to address greenhouse gas pollutants other than CO_2 as part of future rule amendments.

The Air District's Board of Directors will consider adoption of the Proposed Amendments at a public hearing scheduled for December 6th, 2017. Air District staff are publishing this Staff Report in advance of the public hearing to provide the Board of Directors and interested members of the public with a detailed explanation of what the Proposed Amendments will entail and why it is important for the Air District to adopt them. Air District staff encourage interested members of the public to review this Staff Report, along with the accompanying drafts of the Proposed Amendments, and to submit any comments they may have. Further information on public comment opportunities is provided in Section VII of this Staff Report.

Readers should also note that Air District staff published an earlier version of these Proposed Amendments in August, 2017, which were originally scheduled for a public hearing before the Board of Directors on October 18th, 2017. Air District staff have made two further revisions to that earlier version and are now republishing the Proposed Amendments and re-noticing the proposal to allow members of the public to review and comment on the revised version. These revisions include:

- Some additional revisions to the procedures by which the Air District makes its annual demonstration that the "offsets" requirements in the District's NSR program are at least as stringent as what EPA's federal regulations require; and
- Minor revisions to the Air District's emissions banking provisions in Regulation 2, Rule 4, to address deficiencies identified by EPA Region IX on September 14, 2017.

These further revisions are addressed in more detail in Sections III.A.8. and III.A.10., respectively, in this Staff Report. The Air District will consider all comments received on the earlier version of the Proposed Amendments published in August, 2017, along with comments received on the current version being published today. Members of the public do not need to resubmit any comments that were submitted on the August, 2017, version.

II. REGULATORY BACKGROUND

The Air District's permit requirements are set forth in District Regulation 2 (Permits). Regulation 2 contains a number of Rules governing various aspects of the District's permitting programs, of which four are the subject of the Proposed Amendments:

- Regulation 2, Rule 1 (Regulation 2-1), which establishes the general requirements that govern all of the permitting provisions in Regulation 2.
- Regulation 2, Rule 2 (Regulation 2-2), which contains the specific regulatory provisions that implement the Air District's NSR pre-construction permitting program.
- Regulation 2, Rule 4 (Regulation 2-4), which helps implement the NSR program in Regulation 2-2 by establishing procedures for "banking" emission reductions achieved when a source is shut down or curtailed, which can then be used to "offset" emissions increases from subsequent projects under the NSR program to ensure that there is no net emissions increase from all sources under the program.
- Regulation 2, Rule 6 (Regulation 2-6), which contains the regulations that implement the Air District's Title V operating permit program.

This section provides a background summary of the New Source Review and Title V permitting programs and the regulations that would be affected by the Proposed Amendments.

A. The Federal and State Regulatory Context

The Air District's New Source Review and Title V programs are District regulations, but the District adopts them within the context of federal and state requirements that govern how the programs must operate.

1. New Source Review

The genesis of the New Source Review program comes from the federal Clean Air Act (CAA). Congress created the federal NSR requirements in the 1977 CAA Amendments, which specify certain minimum elements that every local NSR program must contain. The Clean Air Act requires local programs to implement these requirements through the Act's system of "cooperative federalism," under which Congress establishes minimum requirements that must be in place in every state throughout the country, but leaves it up to each state or local agency to design its own program best suited to the needs of its specific situation. Each state or local agency is therefore required to develop and adopt an NSR program that meets (or exceeds) the minimum requirements of the federal NSR program, which it must then submit to the United States Environmental Protection Agency (EPA) for review and approval. Once EPA approves the program – as

part of what is known as the State Implementation Plan (SIP) – the program becomes effective under federal law for purposes of the Clean Air Act.

In 1988, the California legislature enacted the California Clean Air Act, which imposes additional state-law NSR permitting requirements. These requirements are in many ways modeled on the federal NSR program, but go beyond the federal program in certain aspects. Each air district in California is required to adopt an NSR program that meets these additional state-law requirements, as well as meeting the federal NSR program requirements administered by EPA.

The Air District's NSR program operates within the overlay of these state and federal requirements. The Air District has a certain amount of latitude to adopt an NSR program that is most suited to the specific circumstances facing the San Francisco Bay Area. But it must at a minimum satisfy the state and federal program requirements, and it is subject to review and approval by the California Air Resources Board and the federal EPA to ensure that it does.

2. Title V

The Title V program similarly comes from the federal Clean Air Act. Title V of the Act was added by Congress in the 1990 CAA amendments, and it requires each state or local agency to implement an operating permit program for "major" facilities, which are defined as facilities with the potential to emit more than 100 tons per year of regulated air pollutants (or, for hazardous air pollutants (HAPs), more than 10 tons per year of any single HAP or 25 tons per year of multiple HAPs). Title V programs must require major facilities to obtain an operating permit, which collects all of the various regulatory requirements applicable to the facility from local, state, and federal regulations and permits into a single permitting document. Title V does not create any new substantive regulatory requirements, but it improves the enforceability and transparency of the existing requirements by consolidating them into one comprehensive permit document. Having all of the requirements in one place makes it easier for facility staff to understand what they must do to comply with the applicable air quality regulations; makes it easier for inspectors to determine whether the facility is complying; and makes it easier for interested members of the public to understand what emissions sources a facility has, what regulatory requirements apply, and whether the facility is in compliance. In addition, the Title V permitting process provides an opportunity to impose monitoring requirements on emissions sources to ensure that they are in compliance, to the extent that any existing monitoring requirements may be inadequate.

As with the NSR requirements, it is up to the Air District to adopt its own Title V program to satisfy the federal requirements. The Air District retains some flexibility to

design its program as appropriate for the Bay Area, but at a minimum it must satisfy the requirements of the federal Clean Air Act.

B. The Air District's NSR Pre-Construction Permitting Program

1. NSR Applicability – New and "Modified" Sources

The NSR program in Regulation 2-2 is the Air District's fundamental permitting requirement for regulating "criteria" pollutant emissions. ("Criteria" pollutants are regional air pollutants for which health-based regional ambient air quality standards have been established.) The program requires a facility to obtain an NSR permit before it can install a new emission source or make a modification to an existing source. In order to be eligible for the permit, the facility must implement a number of substantive air pollution control requirements to limit emissions from the new or modified source.

The NSR program is aimed at new and modified sources because the installation of a new source or the modification of an existing source is the most appropriate time to implement pollution controls. Facilities can incorporate pollution control technologies most efficiently when they are planning for the installation of new equipment or the modification of existing equipment. Furthermore, the capital expenditure required for such pollution control technologies is most appropriate when a facility is installing new equipment or modifying existing equipment, as the facility will in most cases already be spending significant amounts for the facility upgrade project. Imposing additional costs to implement pollution controls is most appropriate at the time when the facility is already investing in facility improvements for other reasons.

For all of these reasons, the NSR program applies to new and modified sources. All of the substantive NSR program requirements in Regulation 2-2 specify that they apply when the Air District is issuing a permit for a new source or a modified source. "Modified source" is defined in Regulation 2-1-234 as any physical or operational change to a source that will result in either (i) an increase in the source's permitted emissions (or for sources that are not subject to any permit limits, an increase in the source's physical capacity to emit air pollutants); or (ii) a significant increase in the source's actual emissions.[1] Whenever a facility installs a new source or makes a "modification" to an existing source within the definition of Regulation 2-1-234, it must obtain an NSR permit under Regulation 2-2.

[1] The second element of this definition, regarding significant increases in actual emissions, was added in the 2012 Amendments. In addition, this element applies only to facilities over the "major facility" thresholds (100 tpy or 250 tpy, depending on the facility). "Major" facilities in the Bay Area include all of the region's refineries, as well as a number of other types of facilities such as power plants, large factories, and the like.

2. Substantive NSR Requirements

In order to obtain an NSR permit for a new or modified source, the facility must comply with the various substantive requirements of the NSR program. These substantive NSR programs elements vary somewhat depending on the pollutant involved. For pollutants for which the region is not in attainment of the applicable ambient air quality standards ("non-attainment pollutants"), the substantive NSR requirements are generally somewhat more stringent. For pollutants for which the region *is* in attainment of the applicable ambient air quality standards ("attainment pollutants"), the substantive requirements are generally somewhat less stringent, as the region's air quality challenges related to those pollutants are by definition not as urgent.

For *non-attainment* pollutants, the basic substantive requirements include (i) using pollution control equipment that limits emissions to the "Lowest Achievable Emissions Rate" (LAER), which in California is also referred to as the "Best Available Control Technology" (California BACT); and (ii) "offsetting" any new emissions increases with emission reductions from existing sources such that there will be no overall emissions increases from regulated sources throughout the region. These requirements applicable to non-attainment pollutants are generally referred to as "Non-Attainment NSR." Both the federal Clean Air Act and the California Clean Air Act impose Non-Attainment NSR requirements.

For *attainment* pollutants, the basic substantive requirements include (i) using the "Best Available Control Technology" (BACT) to limit emissions; and (ii) conducting an air quality impact analysis to ensure that the source being permitted will not jeopardize continued attainment of the applicable air quality standards or cause other adverse air quality impacts. These requirements applicable to attainment pollutants are referred to as "Prevention of Significant Deterioration" (PSD), because the purpose is to prevent the air quality in cleaner areas from deteriorating towards a non-attainment situation. Only the federal Clean Air Act imposes PSD requirements; this is not an element required by the California program.

This general breakdown between the requirements that apply to non-attainment pollutants and the requirements that apply to attainment pollutants reflects the minimum requirement that each NSR program must satisfy under the California and federal Clean Air Acts. In the Bay Area, however, the Air District goes beyond the minimum requirements in some respects. The Air District's NSR program applies certain aspects of the *non-attainment* NSR requirements to pollutants for which the region is designated as *attainment*. Thus, for example, the Air District applies the LAER/California BACT emissions control requirements and emissions offset requirements to many of the attainment pollutants, even though they are legally required only for non-attainment

pollutants. The Air District has always found it important to apply these NSR requirements more stringently than the bare minimum required by law in order to address the air quality challenges facing the Bay Area.

For full details on what the Air District's NSR program entails, please see District Regulation 2-2.

3. Historical Development of the Air District's NSR Program

The Air District's NSR program traces its history back to the 1970s, with numerous amendments since that time. The Air District has revised the program during this time period in order to improve its effectiveness, as well as to keep up with the evolution of the state and federal NSR requirements (among other reasons). The Air District amended the NSR regulations most recently in December of 2012 in order to address several issues.

One primary reason for the December 2012 revisions was to incorporate new requirements for fine particulate matter ($PM_{2.5}$). $PM_{2.5}$ has come under increased regulatory scrutiny in recent years as medical studies have led to heightened concerns about the health impacts of high levels of this pollutant. EPA adopted National Ambient Air Quality Standards for $PM_{2.5}$ in 2006, and in 2009 EPA designated the Bay Area as "non-attainment" of the $PM_{2.5}$ standards. The December 2012 amendments added permitting requirements for $PM_{2.5}$ to the Air District's NSR program.

A second important reason for the December 2012 revisions was to adopt PSD requirements (the requirements that apply for attainment pollutants) into the Air District's NSR program. For historical reasons, NSR implementation in the Bay Area was for many years split between the non-attainment NSR requirements, which the Air District implemented through its own NSR program in District Regulation 2-2, and the PSD requirements, which were administered under EPA's federal PSD regulations. This situation led to confusion and inefficiency, as a single source could be subject to two separate (but highly similar and overlapping) sets of regulations, and could be required to obtain two separate permits (containing similar and overlapping permit conditions) for the same operation. The December 2012 amendments adopted PSD provisions into the Air District's NSR program to address this situation. With the Air District having its own PSD requirements incorporated into its NSR program, there is now one single set of rules governing all aspects NSR regulation in the Bay Area, making NSR implementation and compliance simpler and more straightforward for all involved.

The 2012 Amendments also revised the regulatory language used in the Air District's NSR regulations to make the regulations clearer and easier to implement and enforce. The amendments also revised certain provisions to address concerns raised by EPA about how the Air District's program complies with the minimum requirements of the

federal NSR program. The bulk of the 2012 Amendments took effect on August 31, 2016, after approval by EPA as being consistent with the federal NSR program requirements.[2]

C. The Air District's Title V Operating Permit Program

As noted above, the Title V operating permit program does not impose any new substantive emissions-control requirements, but it enhances the enforceability and transparency of existing regulatory requirements by collecting all existing substantive requirements under District, state and federal regulations and permits into a single, comprehensive permitting document.

The District's Title V program was adopted in 1993 in Regulation 2-6. It requires every "major facility" as defined in Section 2-6-212 to obtain an operating permit, which must set forth all "applicable requirements" that apply to the facility as defined in Section 2-6-202. The permit application and the District's review of it must go through a public process with notice and an opportunity to comment, as set forth in Section 2-6-412. The District may also impose additional monitoring requirements as necessary to ensure ongoing compliance with all applicable requirements, per Section 2-6-409. Please see Regulation 2-6 for full details on what the Air District's Title V program entails.

The 2012 amendments affected the Title V regulations primarily with respect to GHG emissions. EPA began regulating GHG emissions in 2011, when it imposed GHG emissions standards for cars and light trucks, and the agency took the position that doing so meant that stationary GHG emissions sources needed to be subjected to Title V operating permit requirements as well. EPA took the position that Title V programs needed to require permits for GHG emissions sources with the potential to emit 100,000 tpy CO_2e or more. The District's 2012 Amendments added provisions to Regulation 2, Rule 6, to require Title V permits for GHG sources at this threshold level, among other more minor revisions.

D. Developments Since the Most Recent Amendments to the NSR and Title V Programs in 2012

There have been several regulatory developments since the Air District adopted the most recent revisions in December of 2012 that are relevant here. These recent

[2] The 2012 revisions to the NSR provisions in Regulations 2-1 and 2-2 did not take effect until EPA approved them effective August 31, 2016. *See* Final Rule, *Revisions to California State Implementation Plan; Bay Area Air Quality Management District; Stationary Source Permits*, 81 Fed. Reg. 50,399 (Aug. 1, 2016), codified at 40 C.F.R. §§ 52.220(c)(182)(i)(B)(*7*); 52.220(c)(199)(i)(A)(*9*); 52.220(c)(202)(i)(A)(*2*); 52.220(c)(429)(i)(E)(*1*)&(*2*); & 52.270(b)(16) (effective Aug. 31, 2016). The 2012 revisions to the banking provisions in Regulation 2-4 took effect immediately upon adoption on December 21, 2012, however. The Air District made the banking revisions effective immediately so that affected entities could start using them immediately to bank their emission reductions pending completion of the EPA approval process.

developments have driven the need for the further revisions that are the subject of the Proposed Amendments.

One important development is EPA's approval of the Air District's revised NSR program regulations as consistent with the Clean Air Act. EPA approved the District's NSR program as a general matter, but subject to a "limited disapproval" requiring the District to correct certain specific "deficiencies" identified by EPA.[3] EPA's limited disapproval requires the Air District to adopt further revisions to its NSR program and submit them to EPA for approval within 18 months (i.e., by the end of February of 2018). If the Air District does not do so, EPA has the authority to impose sanctions on the Bay Area and step in to implement NSR federally within the region. The need to respond to EPA's limited disapproval is the primary reason District staff have developed the Proposed Amendments.

EPA has also followed a similar process with respect to the banking provisions in Regulation 2-4, although on a more delayed schedule. EPA did not address the Air District's 2012 revisions to its banking regulations in the 2016 limited approval and limited disapproval of the rest of the District's NSR regulations. Instead, it has addressed the banking provisions in a proposed conditional approval published on September 14, 2017.[4] EPA is proposing to approve the banking provisions in Regulation 2-4, but conditioned on the Air District revising the provisions to address some additional deficiencies. This conditional approval will require the Air District to address these identified banking deficiencies in the same manner as with the deficiencies identified in the rest of the NSR provisions discussed in the preceding paragraph. If the Air District does not do so, the conditional approval will become a disapproval, starting the process outlined above that can eventually lead to sanctions.

A second important development is the Supreme Court's 2014 decision in the *Utility Air Regulatory Group v. EPA* case, 134 S.Ct. 2427 (2014), which held that the Clean Air Act does not require permits under either the NSR program or the Title V program for any facility based solely on its GHG emissions. This was a major change from EPA's interpretation, which held that a facility can become subject to both permitting programs based on its GHG emissions alone, even if it does not have emissions of any other pollutant exceeding the relevant applicability thresholds. The Supreme Court's decision still allows EPA to regulate GHG emissions under these permitting programs if a facility triggers permitting requirements because of *other* regulated air pollutants besides GHGs. But the decision means that GHGs cannot, by themselves, make a facility

[3] *See ibid*.

[4] *See* Proposed Rule, *Revisions to California State Implementation Plan; Bay Area Air Quality Management District; Emission Reduction Credit Banking*, 82 Fed. Reg. 43,202 (Sept. 14, 2017).

subject to permitting requirements under either program. The Proposed Amendments to the NSR and Title V programs address this development as well.

In addition to these regulatory developments, Air District staff have also benefitted from further experience in implementing the regulations as revised in 2012. The Proposed Amendments are the result of this experience as well, as discussed further in the next section.

III. PROPOSED AMENDMENTS

This section provides a detailed description of each of the proposed revisions to the Air District's permitting regulations.

A. Revisions to Address "Deficiency Items" Identified by EPA

As noted above, the Air District's NSR regulations must be approved by EPA in order to be effective under the federal Clean Air Act. EPA has approved (or is in the process of approving) the 2012 Amendments, but subject to a requirement that the District correct certain "deficiencies" identified by EPA.[5] The Proposed Amendments will address these identified deficiencies, as outlined below.

These revisions are primarily minor and technical in nature, and they will fulfill the ultimate intent of the 2012 Amendments. Those amendments were intended to make the Air District's NSR program implement all federal NSR requirements consistent with the federal Clean Air Act. To the extent that any of the specific provisions the Air District adopted in 2012 Amendments did not fully accomplish that end in the areas identified by EPA in its limited disapproval, the Proposed Amendments will address any such oversights. In doing so, these further revisions will ensure that the Air District achieves its ultimate purpose of implementing an approvable NSR program that satisfies all applicable requirements of the federal Clean Air Act.

The paragraphs below outline each of EPA's identified deficiency items and how the Proposed Amendments will address it.

1. Agricultural Source Terms

EPA noted that the terms "agricultural source" used in Section 2-1-239 and "large confined animal facility" used in Section 2-1-424 rely on definitions and provisions in other District rules that have not been approved as part of the State Implementation Plan. To address this concern, the Proposed Amendments remove the language that EPA finds objectionable, as it is redundant and/or does not serve any regulatory purpose anymore. These changes will address EPA's concerns without changing the substantive meaning of the regulations in any way.

With respect to Section 2-1-239, this provision sets forth the definition of "agricultural source" for purposes of Regulation 2, Rule 1. The essential function of the definition is to specify that an agricultural source is a source of air pollution (or group of

[5] *See supra* fn. 2 (referencing EPA's limited approval and limited disapproval of the bulk of the 2012 revisions to the NSR regulations) and fn. 4 (referencing EPA's proposed conditional approval of the 2012 revisions to the emissions banking provisions in Regulation 2-4).

such sources located on the same property or on contiguous properties under common ownership or control) that is used in the production of crops or the raising of fowl or animals. This is what the definition does in its initial language. After this initial language, however, the definition then goes on to provide three subsections identifying a number of different types of sources that are covered by this general language, including confined animal facilities, internal combustion engines, major facilities, and any other source that is otherwise subject to Air District regulation. It is this additional language that has given rise to EPA's concern. This additional verbiage is redundant, however, because all of these specific categories of sources are already covered by the general language at the beginning of the definition referring to "a source" of air pollution that is being used for agricultural purposes. Since this additional language is not necessary, the simplest way to address EPA's concern is to delete it entirely and rely instead on the general language at the beginning of the regulation. The Proposed Amendments do this, as well as making some additional grammatical clarifications to the language of the definition.

With respect to Section 2-1-424, this provision sets forth the procedures that apply when a source that is exempt from permitting requirements loses its exemption because of a change in the regulations and must apply for a permit. In most cases, the owner/operator must submit a complete permit application within 90 days of being notified by the Air District that the source now requires a permit. For large confined animal facilities, however, Section 2-1-424 allows 180 days to submit the application. This provision was added in 2006, when the District started regulating large confined animal facilities. The Air District did not believe that there actually were any such facilities within the Bay Area that would have to get permits, but in the event that there were, the District wanted to provide 180 days for such facilities to submit permit applications, instead of the default 90 days. This resulted in the language that EPA is concerned about. Now, over a decade later, it has become clear that the District was correct and that there were not in fact any such facilities within the Bay Area that became subject to permit requirements because of the loss of that exemption. As a result, the provision addressing large confined animal facilities that were in existence as of July 17, 2006, no longer serves any purpose and can be deleted, which will address EPA's concern. The proposed revisions to Section 2-1-424 do so, as well as making some grammatical clarifications to the regulatory language.

Finally, EPA Region IX staff have also requested that the Air District address a similar reference to large confined animal facilities in Section 2-1-113.1.2, which is the exemption for agricultural sources with emissions under 50 tpy. The Air District does not want to exempt large confined animal facilities from having to obtain a permit, even if their emissions are below 50 tpy. Accordingly, this exemption is written to apply to agricultural sources "except for large confined animal facilities subject to Regulation 2, Rule 10." EPA

did not object to this language in its limited disapproval, but EPA Region IX staff have subsequently identified it and asked the Air District to address it. The Proposed Amendments address this point by removing the relevant language from Section 2-1-113.1.2, and instead specifying in the definition of "agricultural source" in Section 2-1-239 that, for purposes of the exemption, agricultural sources do not include commercial operations that keep and feed large numbers of animals over the thresholds that would make them ineligible for the exclusion. By restricting the definition of "agricultural source" in this way, the regulation will limit the scope of the exemption for agricultural sources so that it does not exempt large animal-feeding operations from Air District permitting requirements. But it will do so in a way that does not use the language that EPA Region IX staff asked the Air District to remove.

2. Federal Regulatory Terms Incorporated by Reference in "Federal Backstop" Test

In the 2012 Amendments, the Air District adopted a new applicability provision for its NSR program to respond to EPA concerns that the District's existing applicability test for "modifications" was less stringent than federal requirements. Specifically, EPA was concerned that a facility could make a change to a source that would constitute a "major modification" under the federal NSR requirements, but would not be a "modification" under the District's NSR program. The District noted that this would be a highly unlikely scenario, as the District's "modification" definition is much broader and more stringent than the federal definition, and EPA agreed. Nevertheless, there was at least a hypothetical concern that such a scenario could arise, and so the Air District revised its "modification" definition to address the concern.

The revision the Air District made to address this concern was to add a second element to the District's "modification" definition in Section 2-1-234 to incorporate the federal "major modification" definition as a "backstop" to the Air District's longstanding "modification" test. Under the revised "modification" definition, a change being made at a source is a "modification" and is subject to NSR permitting requirements if it triggers either (i) the District's longstanding "modification" definition (subsection 2-1-234.1), or (ii) EPA's "major modification" definition (subsection 2-1-234.2). This second element ensures that the District's NSR program cannot be any less stringent than the federal requirements, as any change that would be subject to the federal program as a "major modification" by definition will be subject to NSR requirements under the District's program. The Air District refers to this second element of the "modification" test as the "Federal Backstop," as it is intended as a backstop mechanism to ensure that any change to a source that is not caught by the District's longstanding "modification" test in subsection 234.1 will be caught by the federal "major modification" test in subsection 234.2 (to the extent that it is the kind of change that should be subject to NSR permitting requirements).

The Air District implemented this change by incorporating by reference EPA's federal regulations defining "major modification" as set forth in 40 C.F.R. Sections 51.165 and 51.166. (*See* Section 2-1-234.2.) EPA generally approved of this incorporation-by-reference approach, but it pointed out that some of the language in the specific provisions the Air District incorporated was not appropriate for the District's regulatory purposes. Specifically, EPA noted that some of the language in the federal regulations the District incorporated establishes *what state agencies need to put in their regulatory programs*, and not *what individual regulated facilities need to do to comply*. Since the District's NSR Rule sets forth requirements for individual regulated facilities, not for state agencies adopting NSR programs, this language is not appropriate for incorporation-by-reference.

To address this concern, the Proposed Amendments make certain changes to the language in Section 2-1-234.2 incorporating the federal requirements by reference. These changes follow the approaches suggested by EPA to address the concern. The changes are a non-substantive technical amendment only, and they are intended only to address EPA's concern about the specific federal regulatory language that the Air District incorporated by reference in Section 2-1-234.2. They do not change the substance or intent of the "Federal Backstop" test as adopted in the 2012 Amendments.

3. Making PSD Requirements Applicable to Major Sources of Non-Attainment Pollutants

One of the major revisions adopted in the 2012 Amendments was to create new Air District permitting requirements to implement the "Prevention of Significant Deterioration" (PSD) provisions of the federal Clean Air Act, as discussed above in Section II.B.3. EPA raised a concern regarding the applicability test for the District's PSD provisions as set forth in Section 2-2-224, the definition of "PSD Project." This provision defines the applicability of the PSD requirements, because those requirements apply by their terms only to "PSD Projects."

EPA's concern relates to subsection 224.1, the first element of the "PSD Project" applicability test in Section 2-2-224. Subsection 224.1 requires that the facility where the project is located must have emissions over the Clean Air Act's "major" facility thresholds (100 tpy or 250 tpy, depending on the type of facility) in order to be a "PSD Project." But as currently written, subsection 224.1 applies only to "PSD Pollutants," which are defined as pollutants for which the Bay Area is not designated as non-attainment. As a result, having emissions of non-attainment pollutants over the "major" facility thresholds is not sufficient to bring the facility within the District's PSD requirements as subsection 224.1 is currently written. As EPA notes, however, the federal PSD requirements target facilities that are over the applicable "major" facility thresholds for *any* regulated NSR pollutant, including non-attainment pollutants. EPA's concern is that subsection 224.1 as currently

written improperly excludes facilities that are over the "major" facility thresholds for non-attainment pollutants.

To address this concern, the Proposed Amendments revise Section 2-2-224.1 to specify that a project can be a "PSD Project" if it is located at a facility that exceeds the "major" facility thresholds for any regulated NSR pollutant as defined in EPA's federal PSD regulations.[6]

4. Requiring EPA Approval To Use Alternative Computer Models for Air Quality Analysis

One important element of the PSD requirements is that project applicants must use computer modeling to assess what air quality impacts may result from their project. The purpose of this modeling is to ensure that the project will not result in any "significant deterioration" in air quality. EPA has published a regulation that identifies certain computer models that are approved for use in conducting this modeling exercise, and the Air District's PSD regulations require applicants to use the models specified by this regulation in most circumstances. If the specified model is inappropriate for some reason, however, the regulations allow an applicant to use an alternative model as long as the Air District approves it in writing. (*See* Section 2-2-305.3.) EPA approved this provision, but it stated that it wanted the opportunity to review and approve any use of alternative models. The Proposed Amendments therefore include a revision to Section 2-2-305.3 to specify that an applicant must obtain written approval from EPA, as well as from the District, before using an alternative model.

5. Facility Categories For Which Fugitive Emissions Must Be Included in PTE Calculations

Fugitive emissions are included for nearly all purposes in NSR permitting.[7] The only exception involves the threshold for what constitutes a "major" facility under the federal NSR requirements. In determining whether a facility exceeds the federal "major" facility thresholds, fugitive emissions are counted only if the facility falls within certain specific source categories. The Air District's NSR regulations address this issue in Section 2-2-217, the definition of "Major Facility"; and in Section 2-2-224.1, which is the first element of the "PSD Project" definition discussed above, addressing whether the

[6] Note that the project must still have a significant increase and a significant net increase in PSD Pollutant emissions under Sections 2-2-224.2 and 2-2-224.3 in order to be a "PSD Project," and these requirements are not changing. The significant increase test and significant net increase test will still apply for PSD Pollutants only, and not for non-attainment pollutants.

[7] Fugitive emissions are emissions from unintended openings in process equipment, emissions occurring from miscellaneous activities relating to the operation of a facility, and those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. (*See* Reg. 2-1-203.)

facility exceeds the federal "major" facility thresholds. Facilities that are not in any of the specified source categories are not require to count any fugitive emissions when applying these provisions.

The Air District addressed this point in the 2012 Amendments by specifying in Sections 2-2-217 and 2-2-224.1 that fugitive emissions are counted only if the facility is within one of the 28 source categories identified in Section 169(1) of the Clean Air Act. The District also included a specific provision addressing this point, Section 2-2-611, that explains the situation in detail.

EPA generally approved of this approach, but it noted that in addition to the 28 source categories listed in Clean Air Act Section 169(1), the federal program also requires fugitives to be counted for any other stationary source category that was regulated under section 111 or 112 of the Clean Air Act as of August 7, 1980. To address this concern, the Proposed Amendments add language to Section 2-2-611 specifying that fugitive emissions are counted for facilities that are in source categories that were regulated under section 111 or 112 of the Clean Air Act as of August 7, 1980. The Proposed Amendments also make corresponding revisions to Sections 2-2-217 and 2-2-224.1 referencing the provision in Section 2-2-611 where the rule for counting fugitive emissions in specified.

For ease of implementation of this revision, Air District staff intend to develop a list of additional source categories that were regulated under section 111 or 112 of the Clean Air Act as of August 7, 1980. District staff will publish this list on the District's website so that affected facilities and members of the public will know what specific categories are covered.

6. Requirement to Evaluate Impacts on Class I Areas

The federal NSR program requires certain projects to undertake an analysis of potential impacts on visibility and other air quality related values in "Class I" areas, which are special areas such as national parks that have been designated for heightened air quality protection. The 2012 Amendments required projects subject to federal NSR requirements to undertake a Class I area analysis if they are within 100 km of a Class I area. EPA noted that the federal NSR requirement is for a Class I area analysis for any project that "may affect visibility" in a Class I area, and expressed a concern that a bright-line distance threshold of 100 km could exclude some sources beyond 100 km from a Class I area that may still affect visibility within the Class I area despite the long distance. EPA explained that the Federal Land Managers (FLMs) responsible for the Class I areas have published guidance on how to determine when a Class I area analysis is required, and that the Air District could address this issue by referencing that guidance. As EPA stated in its Response to Comments document, "the FLMs use the Federal Land

Manager's Air Quality Related Workgroup guidance (FLAG) in determining when a project may affect a Class I area. . . . BAAQMD may consider referencing the FLAG guidance . . . ."

The Proposed Amendments address this limited disapproval item by referencing the FLAG guidance as suggested by EPA. Specifically, this revision states in Section 2-2-401.4 that any project that may affect visibility in any Class I area must include a Class I area impact analysis in its application materials – with the determination of whether a project may affect a Class I area to be made according to the FLAG guidance. Sections 2-2-402 and 2-2-404.4 then state that if a project is subject to the Class I area analysis requirement in Section 2-2-401.4, the APCO must notify EPA and the relevant FLM(s) about the permit application for the project, and must send those agencies notice of the APCO's preliminary decision whether to approve the application.

In addition, EPA Region IX staff have informally requested another revision, which was not identified as a deficiency in EPA's limited disapproval. This revision concerns a requirement that for PSD projects that may impact Class I areas, the Class I area analysis must evaluate the potential for impacts to other air quality related values besides visibility. EPA requested that where the Class I provisions currently reference only visibility, the language should be expanded to address other air quality related values as well. The Proposed Amendments include corresponding revisions to address this request as well.

7. Time Limits for Providing Offset Refunds

The Air District's NSR program includes an important requirement that facilities need to "offset" any emissions increases from new or modified sources by providing emission reductions from existing sources so as to ensure no overall increase in emissions region-wide. Facilities can offset their new emissions by shutting down existing equipment at the same location, or they can obtain offsets from the District's emissions bank. Offsets in the emissions bank are emission reduction credits from other facilities that the District has evaluated and approved as creditable, and which can be traded between facilities. If a facility does not have on-site emission reduction credits it can use, it must provide offsets from the emissions bank in order to receive its NSR permit.

The Air District has historically had a provision that allows for a facility to obtain a refund for unused offsets (banked emission reduction credits) it has submitted in two circumstances. First, if the facility submits more offsets than are required to obtain the permit, the facility can obtain a refund of any excess over and above what was required. Second, if the facility never builds or operates the source that was authorized by the permit, and the permit has expired or been surrendered, the facility can get its credit back. This provision is currently in Section 2-2-411.

EPA approved this refund provision, but it requested that the Air District establish time limits on how long after permitting the facility can seek a refund. To address this point, the Proposed Amendments establish a time limit of two years after issuance of an authority to construct, or 6 months after issuance of a permit to operate, beyond which the facility would no longer be eligible to obtain a refund. Two years from issuance of an authority to construct is a reasonable amount of time to allow facilities to request a refund, and it should not be overly burdensome for facilities that are eligible for a refund to submit a request during this time frame. Two years also corresponds to the lifespan of an authority to construct under Section 2-1-407. Thus, in cases where the facility is eligible for a refund because it did not actually use its authority to construct to go forward and build a project, the facility will have to have decided within two years of issuance or renewal of the authority to construct whether it intends to construct the source and use the offset credit, or abandon the project and ask for its offset credit back. In cases where the facility decides to go forward and build the project, but it has provided more offsets than are actually necessary, it can obtain a refund of the excess after it builds the project and obtains its permit to operate, but a shorter time frame is appropriate. In such cases, the facility would have to apply to get its excess credit back within 6 months after issuance of the permit to operate. The Proposed Amendments make these revisions in revised Section 2-2-411. (Note also that the Proposed Amendments remove the language in subsection 411.2 referencing issuance of a permit to operate in situations where the facility is eligible for a refund because it did not use its authority to construct to build the project. In such cases, no permit to operate is issued, so this language is redundant.)

8. Offsets Equivalence Demonstration

EPA's deficiency items require the Air District to make several changes to the "Offsets Equivalence Demonstration" procedures in Section 2-2-412. This provision sets forth a mechanism under which the Air District demonstrates to EPA and to the public that the District's offsets program is at least as stringent as what is required under the Clean Air Act and EPA's implementing regulations. Having this demonstration requirement allows EPA to approve the Air District's offsets requirements as being sufficient to satisfy federal requirements, even though the Air District implements its requirements in a slightly different manner than EPA's federal program does.

The Offsets Equivalence Demonstration provision was originally created in 2000 to address EPA Region IX's interpretation of the requirement that emission reduction credits must be "surplus." This means that in order to be creditable, an emission reduction must be over and above what is legally required anyway. To ensure that this requirement is met when a source is shut down or curtailed to generate emission reduction credits,

the source's baseline emissions rate needs to be adjusted to reflect the most stringent regulatory requirements currently in effect. This is known as the "surplus" adjustment.[8]

The Air District's credit-generation rules require emission reduction credits to be surplus-adjusted at the time the credit is generated. But EPA Region IX staff have historically taken the position that credits need to be adjusted again at the time they are used, if there are any new or additional regulations that have come into effect between the time of generation and the time of use. This means that in some cases the Air District may be obtaining fewer offsets for a particular permit under its approach than EPA Region IX would require for that permit under its approach.

Overall, however, the Air District's offsets requirements are far more stringent than the federal requirements, because the District requires offsets at a much lower threshold than the federal regulations do. The federal offsets requirements apply only to facilities emitting over 100 tons per year, and only when those sources make major modifications, whereas the Air District's offsets requirements apply to facilities emitting as little as 10 tons per year, and for any modification that will increase the source's emissions potential, not just major modifications. This means that the Air District obtains more offsets in total from all sources than EPA Region IX would require, even though EPA Region IX's approach may obtain more from certain individual permits, because the District obtains offsets in many situations where EPA's program does not even apply.

The Air District created the equivalence demonstration procedure under Section 2-2-412 to address this situation. The provision requires the District to make a demonstration each year that the total amount of offsets the District has obtained from all sources (without conducting an additional surplus adjustment at the time of credit use) exceeds the total amount of offsets that EPA Region IX would have required for major sources and major modifications (with the additional surplus adjustment at the time of credit use). This annual demonstration provides a mechanism to confirm that the District's program is in fact at least as stringent as what the federal NSR regulations require. The Air District now needs to make a number of revisions to the current equivalence demonstration process to address certain concerns raised by EPA Region IX.

[8] The "surplus" adjustment has also sometimes been called the "RACT" adjustment. This term arose because many of the regulations for which the baseline must be adjusted are regulations that have been adopted to require "Reasonably Available Control Technology" – or "RACT" – to control emissions. These regulations are known as RACT regulations, and so adjusting the baseline to reflect these regulations is sometimes referred to as a RACT adjustment. Surplus adjustment is a more comprehensive term, however, as the adjustment must include all applicable regulations, not just RACT regulations.

- *Additional Provisions To Address EPA Region IX's Position That Sources Must Provide Offsets For More Emissions Than They Can Possibly Emit*

The Air District needs to revise the equivalence demonstration procedures to address a second area that EPA Region IX has recently identified where the Air District's offset requirements apply somewhat differently than the federal offset requirements, in addition to the "surplus-at-time-of-use" issue discussed above. This second difference involves EPA Region IX's interpretation of how to calculate the amount of offsets that are required when a source is modified.

The Air District has always required sources to provide offsets up to the maximum amount of emissions that the source could possibly emit under its permit limits and its physical and operational design – what the regulations call the source's "potential to emit." If a source has already provided offsets for its maximum potential to emit, then the Air District requires it to provide additional offsets only if a modification will increase its potential to emit further. The Air District's regulations require the source to provide additional offsets for the amount of the increase in potential to emit, to ensure that all of the source's emissions will be offset up to the maximum amount that could possibly be emitted into the atmosphere.

EPA Region IX, however, interprets the federal offsets provisions to require offsets for the difference between the source's *actual emissions* before the modification and its maximum potential to emit after the modification. This means that a source being modified will still have to provide additional offsets if its actual emissions are less than its full potential to emit (which is nearly always the case).

The Proposed Amendments will resolve this difference in approach by requiring the Air District to address it in the equivalence demonstration, along with the difference in the two agencies' approach to the "surplus-at-time-of-use" calculation discussed above. That is, in addition to showing that the Air District is obtaining more offsets than EPA Region IX would require under its surplus-at-time-of-use interpretation, the demonstration will also have to show that the Air District is obtaining more offsets than EPA would require under its interpretation of the amount of offsets required when a source is modified. Making this demonstration will ensure that the Air District is in fact obtaining more offsets overall than are required under the federal regulations, taking into account both of these areas where the Air District's program takes a different approach than EPA Region IX does.

- *Revisions To Provide More Detail On How The Equivalence Demonstration Is Conducted*

The Proposed Amendments will also expand on the equivalence demonstration procedures set forth in Section 2-2-412 to provide additional specificity and detail on how exactly the demonstration is conducted. These changes will increase the certainty and transparency of the process by making it clear to all stakeholders what the demonstration will involve and how it will ensure that the Air District's offsets provisions do in fact meet or exceed all federal requirements. These revisions will not fundamentally change the way the Air District currently makes the demonstration (other than to incorporate the specific changes outlined herein). But they will improve the regulation by providing a step-by-step outline of how the Air District will demonstrate equivalence so that all interested parties can clearly understand how the process works.

The Proposed Amendments specify in a high level of detail that the process for making the equivalence demonstration is as follows:

At the end of each year, Air District staff will look back at all of the permits the District has issued that year for major sources and major modifications (i.e., the permits subject to the federal offsets requirements). These sources are called "Federal Major NSR Sources," as defined in proposed new Section 2-2-228.

For each of these major permits, Air District staff will examine the amount of offsets that were required under the Air District's approach compared to the amount that EPA Region IX would have required under its calculation methodology. Any shortfall between what the Air District required and what EPA Region IX would have required is called the "Federal Offsets Baseline Shortfall," as defined in proposed new Section 2-2-229.

Staff will then review the amount of offsets that were provided for the permit, and will examine whether EPA Region IX would have disallowed some of the offset credit under its "surplus-at-time-of-use" adjustment as discussed above. Any shortfall between the amount of credit that the Air District allowed and the amount that EPA Region IX would have allowed is called the "Federal Surplus-at-Time-of-Use Shortfall, as defined in proposed new Section 2-2-230.

Staff will then add the Federal Offsets Baseline Shortfall and the Federal Surplus-at-Time-of-Use Shortfall for each Federal Major NSR Source permit to obtain the total shortfall for that permit; and then add up all the shortfalls for all the Federal Major NSR Source permits issued during the year to obtain the total shortfall for the year. These calculations are set forth in proposed new sections 2-2-412.1 and 2-2-412.2, respectively. The total shortfall represents the total amount by which EPA Region IX would have required more offsets from Federal Major NSR Sources than what the Air District collected from such sources.

In order to demonstrate that the Air District's offset program is equivalent to the federal program, the District will show that it has obtained sufficient offsets from *non-major* sources to make up for this shortfall with respect to Federal Major NSR Sources. The District will make this showing as provided in Section 2-2-412.3. The District will do so by identifying "Equivalence Credits," which are credits associated with non-major permits as defined in proposed new Section 2-2-231. These credits can include banked credits from the Air District's emissions bank that have been provided in connection with permits issued for non-major sources, as well as un-banked emission reduction credits that facilities have relied on as "contemporaneous onsite emission reduction credits" in order to comply with the District's offsets requirements for non-major sources.[9] In addition, they can also include so-called "orphan" $PM_{2.5}$ reductions, which are reductions from facilities that shut down their sources some time ago but did not bank the reductions at the time (as will likely be the case with most historical $PM_{2.5}$ reductions, since the Air District's regulations did not even allow for $PM_{2.5}$ banking until December of 2012).

To demonstrate equivalence, the Air District will identify sufficient Equivalence Credits to make up for the full amount of the shortfall for the year identified under Section 2-2-412.2 (if any). Equivalence Credits can only be used once in an equivalence demonstration: as specified in proposed Section 2-2-412.3.1, if the Air District uses a credit in one year's demonstration, that credit cannot be used again in a subsequent demonstration. In addition, all Equivalence Credits will need to have a "surplus" adjustment applied to reflect EPA Region IX's interpretation with respect to the "surplus-at-time-of-use" issue discussed above. The Air District will make this adjustment under proposed Section 2-2-412.3.2 according to an EPA-approved methodology. The Air District will use only the adjusted amount of credit for purposes of making the equivalence demonstration.

When the Air District has identified sufficient Equivalence Credits to fully make up the shortfall identified from all of the Federal Major NSR Source permits issued during the year, the District will document the demonstration in writing. This will involve a detailed explanation of how the Air District calculated the shortfall for the year under proposed Section 2-2-412.1 and 2-2-412.2, as well as an identification of all of the Equivalence Credits used to make up for the shortfall and demonstrate equivalence under proposed Section 2-2-412.3. With respect to the Equivalence Credits, the District will document that the emission reductions reflected in those credits satisfy what EPA calls the "offset integrity criteria," which are the requirements that the reductions be real, permanent,

[9] The District's regulations allow facilities to use unbanked emission reduction credits, but only if they were generated at the same facility where they were used (i.e., "onsite"), and only if they were generated within a five-year "contemporaneous" period before they are used.

quantifiable, enforceable, and surplus. The documentation that Equivalence Credits satisfy these integrity criteria will come from the following sources:

- For Equivalence Credits that are banked credits that were provided in connection with prior non-major permits (*see* Section 2-2-231.1), the Engineering Evaluation Report the Air District prepared when the credits were banked will document how the emission reductions satisfy the integrity criteria. Banking applicants need to show that their emission reductions satisfy these criteria in order to bank the reductions, and so the Engineering Evaluation Report prepared for the banking application will summarize how the reductions do so.
- For Equivalence Credits that are "onsite contemporaneous emission reduction credits" that were used in connection with prior non-major permits (*see* Section 2-2-231.2), the Engineering Evaluation Report prepared for the permit will document how the emission reductions satisfy the integrity criteria. If permit applicants want to rely on onsite contemporaneous emission reduction credits, they need to demonstrate that the reductions satisfy the integrity criteria as part of their permit application. The Engineering Evaluation Report prepared for the permit will document how they do so.
- For Equivalence Credits that are orphan $PM_{2.5}$ emission reduction credits (*see* Section 2-2-231.3), the Air District will evaluate the reductions to confirm that they satisfy all of the offset integrity criteria directly in the equivalence demonstration, as there will not be any previously-prepared documentation containing this type of analysis. The Air District will review the source that was shut down to generate the emission reductions and will confirm that the reductions are real, permanent, quantifiable, enforceable, and surplus of current regulatory requirements. The Air District will also confirm that the emission reductions have not previously been used as Emission Reduction Credits, in order to prevent "double counting" by using the same reductions twice for different purposes.

In this way, the Air District will guarantee in a publicly transparent fashion that the District has obtained sufficient offsets to make up for any identified shortfall, and that the emission reductions used in the demonstration satisfy all of EPA's "integrity criteria." The Air District will also make all of the underlying documents (e.g., banking applications, Engineering Evaluation Reports, etc.) available for public review when it publishes its equivalence demonstration report. The Air District will not be allowed to use any emission reductions in the equivalence demonstration unless sufficient documentation exists to confirm that the reductions satisfy all of the requirements to constitute "Equivalence Credits" as outlined above.

Once the Air District has completed the equivalence demonstration, it will submit the demonstration (with all supporting documentation) to EPA, and will also make it

publicly available and feature it prominently on the Air District's website so that it may be easily accessed by interested members of the public. This process will allow EPA and all other interested parties to review the demonstration and confirm that the Air District's offsets requirements are in fact at least as stringent overall as what EPA Region IX would require under its federal offsets regulations.

- *Addition Of A Backstop Mechanism That Will Apply In The Event The Air District Cannot Make The Equivalence Demonstration*

EPA Region IX also expressed a concern in its 2016 limited disapproval that Section 2-2-412 does not provide any remedy in the event that the Air District is unable to make the required demonstration. The Air District has never had any difficulty making this demonstration because, as noted above, the District's offsets program as a whole is much more stringent than what the federal regulations require. Nevertheless, EPA Region IX has directed the Air District to provide an explicit remedy that would apply in the unlikely event that the Air District is ever unable to make the demonstration. EPA Region IX requested that the District specify that in the event that the District does not make the required demonstration, then permit applicants applying for permits for federal major sources and major modifications must provide the full amount of offsets that would be required federally under EPA Region IX's regulatory approach, until such time as the District has made up any shortfall.

The Proposed Amendments will make this change, with revised regulatory language that will be set forth in a new Section 2-2-415. The revised language states that if there ever is a shortfall situation, then the APCO will require additional offsets for all new major sources and major modifications according to EPA Region IX's approach. If the APCO fails to make the required demonstration by the applicable deadline, then every permit for a major stationary source or major modification issued after that date must provide offsets at that level, until such time as the APCO has obtained sufficient offsets from non-major sources and modifications such that it can make up for the shortfall and demonstrate equivalence once again (and if the shortfall continues for multiple years, the APCO will have to demonstrate that it has made up for all of the shortfalls for all years before equivalence can be demonstrated).[10]

[10] This does not mean that the APCO will go back and require additional offsets from existing sources that have already received NSR permits. Existing permits that have already been issued will not be reopened. This requirement will apply prospectively only: That is, it will require only that any *future* permits for new and modified sources that are issued *after* any failure to make an equivalence demonstration will have to provide additional offsets according to EPA's federal approach.

- *Addition Of $PM_{2.5}$ As A Pollutant Addressed In The Demonstration*

The Proposed Amendments will also add $PM_{2.5}$ as a pollutant subject to the equivalence demonstration requirement, in addition to NOx and POC, which are the pollutants currently subject to this provision. $PM_{2.5}$ is also a federal non-attainment pollutant, and so the Air District needs to demonstrate that its offsets program is at least as stringent as the federal requirements for this pollutant as well.

- *Elimination Of The Requirement For The Air District To Provide Offsets To Make Up For Any Shortfall*

The Proposed Amendments will also remove the language in the existing regulation stating that if the Air District cannot make the equivalency demonstration, then the District will make up any shortfall by providing credits from the Small Facility Banking Account or by obtaining the credits itself. This language regarding how to address any shortfall is being replaced by the concept described above under which major facilities will provide offset credit calculated according to EPA Region IX's approach. In the event that there is any shortfall in the amount of credit that major facilities have provided, it would not make sense to make up that major facility shortfall at the expense of small facilities, which is what would happen if the Small Facility Banking Account is depleted to make up the shortfall. Similarly, it would not make sense to require the District to spend public money to purchase credits on the open market to do so, which is what would happen if the District had to make up any shortfall itself. Having major facilities adjust their credits as outlined above is a preferable way to handle this potential concern, compared to having the burden fall on small facilities or on the Air District's financial resources.

9. Emission Reduction Credit for Shutting Down "Fully Offset" Sources

The Air District's rules for determining the amount of emission reduction credit that is available when a facility shuts down or curtails operation of a source depend on whether or not the source's emissions were "fully offset." For a source that is not fully offset, the amount of credit available is based on the source's *actual emissions* during a 3-year baseline period before the shutdown. For a source that is fully offset – i.e., the facility provided emission reduction credits for the full amount of the source's permitted emissions at the time of permitting – the amount of credit available is based on the source's *maximum permitted emissions*, even if its actual emissions were less than the maximum permitted amount during the baseline period. These rules are contained in Sections 2-2-605.1 (non-fully-offset source) and 2-2-605.2 (fully offset source), as well as in Section 2-2-213 (definition of "fully offset source").

EPA has taken the position that the federal NSR requirements do not allow for the source's maximum permitted emissions (also known as "allowable emissions" or "potential to emit") to be used as the baseline for determining the amount of emission

reduction credit available when a source is shut down or curtailed. EPA has taken the position that the source's actual emissions must be used to establish the baseline in all cases, and has requested that the District remove the provision allowing maximum permitted emissions to be used for "fully offset" sources.

The Proposed Amendments address this point by removing the provision that allows "fully offset" sources to use their permitted emissions to establish the baseline for the emission reduction credit calculation. The Proposed Amendments remove current Section 2-2-605.2 (the provision for fully offset sources), and instead make the actual-emissions baseline provision in current Section 2-2-605.1 apply in all cases. The revisions also reorganize the remaining regulatory language somewhat. In addition, a related revision removes Section 2-2-213, the definition of "fully offset source," which will be redundant when the special baseline provision for fully offset sources is removed.

10. Revisions to Banking Provisions

As noted above, EPA has proposed a conditional approval of the Air District's banking provisions in Regulation 2, Rule 4, subject to two deficiency items that need to be addressed.[11] Air District staff are proposing to address these items as follows.

First, EPA is concerned that Regulation 2-4 does not contain sufficient provisions to ensure that emission reductions to be banked satisfy what EPA calls the "offset integrity criteria," which are the requirements that the reductions be real, permanent, quantifiable, enforceable, and surplus. These requirements are already part of the current regulation, because in order for emission reductions to be bankable they must satisfy the definition of "Emission Reduction Credit" set forth in the regulations, which specifically states that the reductions must be real, permanent, quantifiable, enforceable, and surplus. (*See* Regulations 2-4-201 and 2-2-211.) If the reductions do not satisfy all of these criteria, they do not quality as "Emission Reduction Credits" and are not eligible for banking. Nevertheless, in response to EPA's concerns, Air District staff are proposing a revision to

[11] EPA also identified the concerns discussed above in Section III.A.9., relating to the provisions for calculating baseline emissions for determining the amount of credit available for "fully offset" sources, in connection with the banking rules in Regulation 2, Rule 4. These provisions implicate Regulation 2-4 because they govern the amount of credit that can be banked for such sources. The proposed revisions discussed in Section III.A.9. above will address this concern with respect to the banking provisions in Regulation 2-4 as well as with respect to the NSR provisions in Regulation 2-2. In addition, the Proposed Amendments will also remove the related provision in Section 2-4-301.7 that referenced the procedure for granting credit for reductions in permit limits that have been fully offset. Since the Air District will be basing the amount of bankable credit on a source's *actual emissions* baseline in all cases (including for "fully offset" sources), the language in Section 2-4-301.7 basing the amount of credit on *permitted emissions* needs to be removed.

Section 2-4-301 to state explicitly that an applicant may bank emission reductions only if the APCO determines that they satisfy all of these "integrity" criteria.

Second, EPA is concerned that the banking provisions do not ensure that banked credits will reflect permanent emission reductions, because subsection 2-4-302.3 allows a Banking Certificate to include conditions that would provide an opportunity for the emissions to resume. Air District staff are proposing to address this concern by deleting subsection 302.3, which is redundant in any event. The requirement that reductions must be permanent will be enforceable through Section 2-2-605, which does not have any provision allowing the emissions involved to resume, as well as through the revised language in Section 2-4-301 discussed in the preceding paragraph.

B. Revisions to Address Issues Identified by Air District Staff Based on Recent Experience in Implementing the 2012 Amendments

As noted previously, the Air District's experiences in implementing the NSR program since the 2012 Amendments were adopted have highlighted a need for certain revisions and clarifications to make the program function better. These are outlined below.

1. Section 2-1-218 – Definition of "Regulated Air Pollutant"

Since adoption of the 2012 Amendments, Air District staff have realized that there is some potential for confusion regarding the addition of greenhouse gases as a pollutant that is regulated under the District's NSR program. Subjecting greenhouse gases to regulation raises concerns regarding two provisions in Regulation 2, Rule 1, that need to be addressed.

The first concern involves the exemption for agricultural sources in Section 2-1-113.1.2. This provision exempts qualifying agricultural sources from having to obtain an Air District permit, as long as their emissions are less than 50 tons per year of all regulated air pollutants except fugitive dust. Given the nature of GHGs, if this 50 tpy threshold applied to GHGs, it would eliminate the exemption for virtually all qualifying agricultural sources. This was never the intent behind the 2012 Amendments, but as written the Amendments can be interpreted to have this effect. To address this situation, the Proposed Amendments make clear that the exemption applies as long as a source's emissions are less than 50 tons per year of all regulated air pollutants except fugitive dust *and greenhouse gases*.

The second concern involves Section 2-1-413, which governs permits for sources that will be used at multiple locations throughout the Air District's jurisdiction. The provision allows applicants to obtain a single permit allowing use at any location within the District for qualifying sources, as long as the source does not emit more than 10 tpy of any regulated air pollutant. Again, given the nature of GHGs, applying this 10 tpy limit

to GHG emissions would exclude virtually all qualifying sources from being able to avail themselves of this provision. This was not the intent of the 2012 Amendments, and so the Proposed Amendments revise Section 2-1-413.1 to make clear that the 10 tpy limit applies only to regulated pollutants other than GHGs.

2. Section 2-1-413 – Time Limits On Operation of Sources Under Multiple-Location Permits

In the 2012 Amendments, the Air District addressed some confusion that had arisen regarding two different scenarios for permitting sources that are not permanently installed at a facility. The two scenarios involved are (i) portable equipment registered with the California Air Resources Board under that agency's Portable Equipment Registration Program (PERP); and (ii) equipment that is not eligible for CARB's PERP program, but is permitted by the Air District for use at multiple different locations around the Bay Area. The pre-2012 regulations blurred the different regulatory requirements for these scenarios somewhat. To address this situation, the 2012 Amendments adopted a more definite distinction between (i) PERP-registered equipment, which is subject to ARB's PERP requirements and is therefore exempt from having to get a permit from the Air District under Section 2-1-105; and (ii) non-PERP-registered equipment that is used at multiple locations, which is not eligible for the PERP exemption (because it is not PERP-registered), but which can get a special multi-location permit from the Air District under Section 2-1-413.

One element of the PERP program is that sources cannot be located at a facility for more than 12 months in order to be considered "portable" under the program's eligibility guidelines. Under the Air District's pre-2012 NSR regulations, this requirement also applied to District multi-location permits. When the District clarified the distinction between the two scenarios, however, the 12-month residency limit was not carried over into the multi-location permit provisions in Section 2-1-413. This lack of a time limit has led to some concerns about the potential for circumvention using this provision. That is, concerns have arisen that a facility could apply for a multi-location permit under Section 2-1-413 for a source that it does not ever intend to operate at multiple locations. In such a situation, the facility (or a contractor working on the facility's behalf) could use Section 2-1-413 to permit a source that it intends to operate exclusively at that facility. A source like this should obviously be included in the facility's permit, and not under a separate multi-location permit, but in this scenario the facility (or its contractor) would be able to obtain a separate permit instead of having it included in the facility's permit.

In order to avoid the potential for such an outcome, the Proposed Amendments apply a 12-month time limit that would preclude the use of 2-1-413 for any source that will reside at the same facility for more than 12 months. In the event that a source with a multi-

location permit were operated at a single facility for more than 12 months, it will lose its eligibility for the multi-source permit and will have to be permitted from scratch as a new source. This limitation will be added in a new subsection 2-1-413.7.

3. Sources Operated By Agents/Contractors On Behalf of Facility Owners

Confusion has arisen regarding situations where a third-party contractor may operate an emissions source at a facility on behalf of the owner/operator of the facility. For example, a facility may have a need to hire a contractor to bring in a piece of equipment for a period of time to perform some work in connection with the operation of a process unit at the facility. If the equipment will be used at the facility for more than 12 months, the Air District's intention is to treat that equipment as part of the facility, even if it is owned and operated at the facility by the independent third-party contractor. Such a situation falls under the existing definition of "facility" in Section 2-1-213 through the language in that definition stating that a facility includes all sources "under common ownership or control." If the facility owner hires the contractor to bring the equipment onsite to assist with the operation of the facility, then the equipment is under the ultimate control of the facility owner. This means (among other things) that any emissions from the equipment are subject to offsets to the extent required under Sections 2-2-302 and 2-2-303, if the facility is over the offsets applicability thresholds set forth in those regulations. In such a case, it will be the facility's ultimate responsibility to provide the offsets for the contractor's equipment, although the facility can negotiate with the contractor to have the contractor procure the offsets as part of the contract to provide the equipment.

The Proposed Amendments add language to Section 2-1-213 to clarify how the definition applies in this situation. They also include language to prevent circumvention of the 12-month time limit by using multiple, successive temporary sources to perform the same function at the refinery.

C. Revisions to Address the Supreme Court's *UARG v. EPA* Decision

As noted above, in 2014 the Supreme Court ruled in the *UARG v. EPA* case that facilities cannot become subject to the Clean Air Act's NSR and Title V requirements based on their greenhouse gas emissions alone. The Court reached this conclusion based on its interpretation of the terms "major emitting facility" in the Act's NSR provisions and "major source" in its Title V provisions. The Court found that the Act's conception of a "major" source does not encompass sources of GHG emissions, such that GHG emissions alone cannot make a facility "major". Only if a facility exceeds the "major" source thresholds for some other regulated pollutant besides GHGs will it become subject to NSR and Title V permitting.

This ruling impacts how EPA's federal NSR and Title V regulations are interpreted. In particular, it impacts EPA's definitions of the terms "regulated air pollutant" and "subject to regulation," which defined those terms to make GHGs a pollutant that could bring a facility within the NSR and Title V programs regardless of any other pollutants. The Supreme Court's ruling resulted in the portions of those definitions that regulated facilities based solely on their GHG emissions being vacated.

With respect to the Air District's NSR program in Regulation 2-2, the District does not need to make any major revisions because the NSR program addresses GHGs primarily by incorporating the federal definitions by reference. As a result, the Supreme Court's ruling rendering the relevant portions of those definitions ineffective did the same thing with respect to the Air District's program, leaving nothing in the District's regulatory language that need to be fixed. The one exception is in Section 2-2-214, the definition of Greenhouse Gases, which includes a provision addressing how GHGs are to be measured for purposes of determining whether GHGs alone can make a facility subject to NSR regulation. As the Supreme Court has now made clear that GHGs cannot in fact make a facility subject to regulation, this element of Section 2-2-214 is no longer necessary and should be removed.

With respect to the Title V program in Regulation 2, Rule 6, there are more regulatory provisions that need to be addressed. The Air District added a number of GHG-related provisions to its Title V program in the 2012 Amendments based on EPA's original interpretation that GHGs had to be included in that program. These revisions added greenhouse gases to the definition of "regulated air pollutants" subject to Title V permitting in Section 2-6-222, and they also made a number of other related revisions to implement this new requirement. In light of the Supreme Court's *UARG* decision, it is now clear that these revisions are in conflict with the Clean Air Act's Title V requirements.

As a result, the Proposed Amendments remove the 2012 revisions that added greenhouse gases to the Title V program. That is, the Proposed Amendments remove Section 2-6-222.6, the provision that added greenhouse gases to the definition of "regulated air pollutant," as well as all of the other revisions related to greenhouse gases,

so that the regulations will revert back to how they were before the 2012 revisions. These changes will make the Air District's Title V program consistent with how the Supreme Court has interpreted the Title V requirements in the *UARG* case.[12]

[12] Note that *UARG*, and the corresponding elements of the Proposed Amendments, only address the issue of whether a facility can become subject to Title V permitting requirements based on its greenhouse gases. As explained above, the Supreme Court held that a facility cannot become subject to Title V based on greenhouse gases alone, but instead must have emissions of some other regulated air pollutant above the Title V trigger levels in order to become subject to the Title V requirements. Once a facility becomes subject to Title V permitting because of some other regulated air pollutant, however, greenhouse-gas-related permit requirements are still included in the Title V permit. Title V permits must include all "applicable requirements," even where those applicable requirements address greenhouse gases. This principle of Title V permitting was not affected by the *UARG* decision.

IV. ADDITIONAL REVISIONS CONSIDERED DURING RULE DEVELOPMENT PROCESS

In addition to the revisions that will be made by the Proposed Amendments, which are largely technical and administrative in nature, Air District staff also initially developed two other more substantive changes to the NSR program at the public workshop stage. Staff included these proposed changes in the workshop drafts circulated for public review and comment in May of 2017, and discussed them with interested members of the public at three public workshops held in June of 2017. Air District staff are not proposing action on these two provisions at this time, for the following reasons.

A. Air District Pre-Approval for Petroleum Refinery Crude Slate Changes (Clean Air Plan Control Measure SS9)

The first significant substantive change that Staff workshopped was a provision that would require petroleum refineries to obtain approval from the Air District before making any significant changes in their crude slates. Staff developed this proposed change to implement Control Measure SS9 in the 2017 Clean Air Plan, *Spare the Air, Cool the Climate*.

As explained in detail in the May 2017 Workshop Report, Staff proposed this provision in order to help the District enforce its New Source Review permit requirements when refineries change their crude slates. If a refinery changes its operations in order to accommodate different crude slates in a way that will increase emissions, such a change is a "modification" that requires an NSR permit. But if the refinery goes ahead and makes such a modification without applying for or obtaining an NSR permit, the Air District may not ever know about the modification because the change may be subtle and not immediately obvious to District inspectors. The proposed regulatory revision would require refineries to apply for approval for any "significant crude slate change" as defined in the regulation – which would give the Air District information about the change and allow the District to determine whether the change involves a "modification" subject to NSR permitting requirements. Reviewing and approving such changes in advance would give the District an opportunity to ensure that refineries are complying with all applicable NSR requirements when they make significant changes in their crude slates.

After further analysis of the issues involved, and after considering the comments received through the public workshop process, Air District Staff have concluded that the most appropriate path forward at this point is to defer action on the proposed crude slate provision in order to collect and assess more data enabling a better method for implementing the proposal. There are a number of important issues that need to be

worked out, including issues such as how a "significant" crude slate change would be defined, the process and timing for obtaining District review and approval for such a change, and other important implementation issues.

In particular, deferring final action at this stage will allow staff and stakeholders to review and evaluate additional information about the refineries' crude slates and how crude slate changes may relate to air emissions. The Petroleum Refining Emissions Tracking Rule (Regulation 12, Rule 15) requires refineries to submit crude slate information to the District, but that requirement has only recently taken effect and the District has been receiving the information only for a short period of time. Taking the time for further evaluation will allow more data to be collected.

Moreover, initial indications from reviewing this crude slate data show that in some cases, the attributes of the crude slates that the refineries have processed historically are not "normally distributed," meaning that the observed data points are probably insufficient to get an accurate understanding of the normal variability of the data, which makes it very difficult to determine what is a significant change from typical operations. If the attributes of the crude that a refinery processes are highly variable from month to month, it can be difficult to determine how much of a change signals a "significant" change in crude slate. Additional analysis will help Air District staff and stakeholders better understand how to make such a determination. Furthermore, it appears that in some cases historical data about crude slate attributes may not be immediately available and may require additional development. Some information on crude constituents may be able to be re-created from surrogate sources, but doing so will introduce inaccuracies that make it difficult to determine what is normal variation and what is a significant change. Given these circumstances, it would be prudent to assess the available data about the refineries' crude slates more comprehensively, to collect additional data, and to investigate further how changes in crude slates relate to changes in air emissions.

For all of these reasons, Air District staff are not finalizing the proposed crude slate provisions at this time. Staff are moving forward with the technical and administrative revisions discussed above in Section III, which are ready to be finalized and which are under an EPA-imposed deadline for final action. These revisions need to be finalized and approved by EPA before March 1, 2018, or the Bay Area could face sanctions under the Clean Air Act. Staff will continue to work on developing the proposed crude slate provisions, and will develop a final proposal for consideration by the Board of Directors when all of the implementation details have been fully worked out.

In the meantime, Air District staff will continue to use existing enforcement tools to focus on refinery crude slate changes to help detect and prevent any non-compliance

with NSR requirements. Specifically, District staff will continue to review monthly crude slate reports providing information on the attributes of the crude that each refinery processes each month under Regulation 12-15-408. If District staff find significant changes in the crude attributes suggesting that the refinery has changed its crude slate in a significant way, and if there are indications that the refinery may have undertaken a modification in order to accommodate the change, District inspectors and engineering staff will conduct an investigation to determine whether any violations of any NSR permitting requirements have occurred. This enforcement approach will provide an effective interim measure to address the potential for NSR non-compliance while the District evaluates how best to implement the proposed crude slate provisions under Clean Air Plan Control Measure SS-9.

B. Expanded "Best Available Control Technology" Requirement for Greenhouse Gases (Clean Air Plan Control Measure SS17)

The second significant substantive change that was included in the workshop drafts circulated in May was a proposal to expand the scope of the "Best Available Control Technology" requirement for greenhouse gases in the Air District's New Source Review Program. Air District staff included a proposal to require NSR permit applicants to implement Best Available Control Technology (BACT) to reduce their greenhouse gas emissions for any new or modified source with an emissions increase of 25,000 tpy CO_2e or more. This would represent a substantial expansion in the scope of the requirement, which currently applies only for projects with increases of 75,000 tpy CO_2e or more, and only at "major" facilities (i.e., those with criteria pollutant emissions of over 100 tpy or 250 tpy, depending on the type of facility). Staff developed this proposed change to implement Control Measure SS17 in the 2017 Clean Air Plan.

After the public workshops, however, the California Legislature adopted AB 398, which added a new provision to the Health and Safety Code prohibiting the District from adopting any regulation to control CO_2 emissions from any sources subject to California's cap-and-trade regulations. The legislation amends Health & Safety Code section 38594 to state that "[a] district shall not adopt or implement an emission reduction rule for carbon dioxide from stationary sources that are also subject to [cap-and-trade]." This language effectively prohibits the District from moving forward and adopting the reduced BACT threshold for greenhouse gases that was proposed at the public workshop stage, since nearly all stationary sources with emissions over 25,000 tpy that could be subject to NSR permitting are subject to the cap-and-trade regulations, and because the bulk of their greenhouse gas emissions are CO_2. Air District staff have therefore removed the lowered greenhouse gas BACT threshold provision from the final version of the Proposed Amendments.

It is important to note, however, that the District's authority to maintain the existing 75,000 tpy threshold is not affected. Applying BACT at the 75,000 tpy threshold is required under the federal Clean Air Act as set forth in EPA's implementing regulations in 40 C.F.R. section 51.166. The provision in AB 398 stripping the District of its authority to implement CO_2 regulations specifically excludes regulations "required to comply with the federal Clean Air Act (42 U.S.C. Sec. 7401 et seq.) or regulations implementing that act." The current requirement to apply BACT for greenhouse gas emissions sources at the 75,000 tpy threshold will remain unaffected by the Proposed Amendments.

It is also important to note that AB 398's prohibition on regulating CO_2 emissions still leaves the Air District with regulatory authority over *non*-CO_2 greenhouse gas pollutants, such as methane and black carbon. These pollutants were not included as part of the proposal developed under Control Measure SS17, which covered only the six greenhouse gases that are currently regulated under the existing 75,000 tpy BACT requirement (of which CO_2 is the main constituent). But there is no reason why the Air District could not consider developing a BACT requirement – or some other type of regulatory approach – to address these other important contributors to climate change under Regulation 2. Air District staff will continue to evaluate whether any such alternative approaches may be appropriate for further development.

V. EMISSION REDUCTION AND COMPLIANCE COST IMPACTS

Because the Proposed Amendments are primarily technical and administrative in nature, they are not expected to have any significant direct impact on emissions in the Bay Area – although by allowing the Air District's permitting programs to function more effectively, they will be indirectly helping to achieve all of the important air quality benefits associated with those programs. By the same token, the Proposed Amendments are not expected to result in any significant compliance costs for regulated entities.

A few of the Proposed Amendments will result in minor expansion of the scope of the NSR program at the margins, but the changes will be minimal and will not make any substantial changes to how the program functions currently. For example:

- The revision to Section 2-2-224.1 to make the PSD provisions of Regulation 2-2 applicable to major sources of *non-attainment* pollutants as well as major sources of attainment pollutants (discussed above in Section III.A.3.) could slightly expand the universe of facilities subject to these requirements. This could occur if there are facilities that are currently below the "major" source threshold for all attainment pollutants, but are above the threshold for a non-attainment pollutant. If such a facility implements a project with a significant net increase in attainment pollutants, it would be required to implement the various PSD requirements for those attainment pollutants with significant net increases.
- The revision to Section 2-2-611 requiring a few additional categories of facilities to include their fugitive emissions when determining if they exceed the "major" source thresholds (discussed above in Section III.A.5.) could make more facilities "major" facilities. This could occur if there are facilities in those categories that are currently below the "major" facility threshold, but are close enough to it that their fugitive emissions will push them over the threshold.
- The revision to Section 2-2-605 to remove the provision allowing "fully offset" sources to use their permitted emissions as the baseline for calculating bankable emission reduction credits when such sources are shut down, which will require them to use their actual emissions as the baseline instead (discussed above in Section III.A.9.), could reduce the total amount of emission reduction credits available regionwide to offset future NSR emissions increases. This could result in the stock of banked credits declining more quickly, which could cause a marginal increase in the cost of credits and could lead to the emissions bank being exhausted at an earlier date.
- The revision to Section 2-2-401.4 that would use the approach suggested by the Federal Land Managers' working group to determine whether a PSD Project applicant is required to evaluate air-quality-related impacts in Class I Areas

(discussed above in Section III.A.6.) could potentially expand the universe of project applicants that must conduct these analyses. This could occur if any "major" facilities propose projects with emissions increases exceeding 1,000 tons per year located more than 100 km from a Class I Area. If a facility proposes such a project, the facility may be required to conduct an evaluation of potential impacts in the Class I Area, even though the facility is beyond the 100 km limit under the current rule.

These changes constitute an incremental expansion of the scope of the Air District's NSR program at the margins, and they could therefore potentially require a facility to implement some additional requirement to limit emissions in a way that would not be required absent the Proposed Amendments. The potential for such a situation to arise in practice would depend on whether there are any facilities in the Bay Area in any category described above that could be affected by these changes, and whether (and to what extent) such facilities may decide to pursue projects involving the installation of new sources, or the modification of existing sources, that would implicate any of the changes. Moreover, to the extent that there are any such facilities with new or modified sources that may be affected, the extent of any substantive changes in what those facilities will be required to do will most likely be limited. For all of these reasons, the potential for any changes in how facilities will actually implement their operations under the Proposed Amendments is expected to be minor.[13]

Beyond these provisions making minor changes to the scope of the Air District's NSR program, the remainder of the Proposed Amendments do not affect the program's substantive requirements in any way. Many of the requirements apply only to the procedures for how the permitting programs will be administered, such as the requirement for EPA to approve the use of alternative computer models (discussed above in Section III.A.4.), the time limits on applicants' requests for offset refunds (discussed above in Section III.A.7.), and the procedures under which the Air District will make its offsets "equivalence demonstration" (discussed above in Section III.A.8.). Others involve only revisions to the specific terminology used in the regulations without any substantive changes, such as the language changes in the agricultural source provisions (discussed above in Section III.A.1.) and the terms from EPA's regulations incorporated by reference into Section 2-1-234.2 (discussed above in Section III.A.2.). And some, such as the revisions to the emissions banking regulations (discussed above in Section III.A.10.), simply make explicit what is already implied in the current provisions, again with no

[13] Furthermore, EPA will require such changes whether the Air District makes them or not. That is, if the Air District does not make these changes, EPA is authorized to step in and impose NSR regulations federally, which will subject permit applicants to all of these requirements anyway. As such, in many ways it is not the Proposed Amendments that are making these regulatory changes, but EPA's federal requirements under the Clean Air Act that require permit applicants to do all these things.

substantive changes. These changes will not require permitted facilities to do anything differently than under the current regulatory system, and so they will not affect emissions or create any additional compliance costs. They will simply make the revisions necessary to allow EPA to fully approve the District's regulatory programs and to achieve the other related goals of the Proposed Amendments.

Given the narrow scope of the Proposed Amendments and the fact that they are limited to minor technical and administrative changes in the regulations, the Proposed Amendments are not expected to result in any significant direct emission reductions, and are similarly not expected to result in any significant compliance costs. Environmental impacts and cost concerns are also addressed further in the CEQA Initial Study and in the socioeconomic analysis for the Proposed Amendments, which are being published in conjunction with this Staff Report.

VI. REGULATORY ANALYSIS REQUIREMENTS

When the Air District adopts or amends its regulations, it is subject to certain statutory requirements to assess potential environmental, regulatory, socioeconomic and other impacts. Air District staff have evaluated all of these potential impacts in order to ensure that all applicable statutory requirements have been fulfilled. This section summarizes those requirements and how they have been satisfied for the Proposed Amendments.

A. California Health & Safety Code Requirements

Before adopting or amending any regulations, the Board of Directors must make certain findings required by **Health & Safety Code Section 40727**. These include findings of necessity, authority, clarity, consistency, non-duplication, and reference. Air District Staff have conducted an analysis of the Proposed Amendments and have concluded that there is substantial evidence on which the Board of Directors can make these required findings. The basis for this conclusion is as follows.

- **Necessity:** This finding requires a demonstration that a need exists for the proposed amendments, as demonstrated by the record. As discussed above in Section III, the Proposed Amendments are necessary to address recent developments affecting the Air District's NSR and Title V permit programs. Specifically, the Proposed Amendments are necessary for three reasons. First, the Proposed Amendments are necessary to address the deficiencies identified by EPA in its "limited disapproval" of the District's NSR regulations. Making these changes is necessary so that EPA can fully approve the Air District's NSR program under the Clean Air Act (and so that the Bay Area can avoid sanctions for failure to have an EPA-approved program). Second, the Proposed Amendments are necessary to refine the Air District's NSR program to ensure that it functions as efficiently and effectively as possible. Third, the Proposed Amendments are necessary to align the Air District's regulations with recent legal developments affecting the NSR and Title V provisions of the Clean Air Act.
- **Authority:** This finding requires identification of the state or federal law that permits or requires the Air District to adopt the Proposed Amendments. The federal law that requires the Air District to adopt NSR permitting regulations is Part C and Part D of Title I of the Clean Air Act. The federal law that requires the Air District to adopt Title V permitting regulations is Title V of the Clean Air Act. The California law that requires the Air District to adopt permitting requirements to provide for attainment of ambient air quality standards is Division 26, Part 3, Chapter 10 of the California Health & Safety Code (commending with Section 40910). Additional California law authorizing the Air District to adopt NSR and Title V permitting

regulations is contained in Sections 40001 and 40702 of the California Health & Safety Code, which are general provisions authorizing California air districts to adopt and implement appropriate regulations as necessary to achieve and maintain air quality standards and to execute the powers and duties granted to and imposed on them.

- **Clarity:** This finding requires that the Proposed Amendments are written so that Regulation 2's meaning can be easily understood by persons affected by it. As explained in this Staff Report, Air District Staff have conducted a thorough review of the regulatory language contained in the Proposed Amendments to ensure that it presents the requirements of the NSR and Title V permitting programs in the clearest possible manner. District Staff have also conducted a public outreach process and engaged with members of the public who will be affected by the regulations to solicit their input on how the regulations should be written and presented. The final version of the Proposed Amendments reflects this public input.
- **Consistency:** This finding requires that the Proposed Amendments must be in harmony with, and not in conflict with or contradictory to, existing statutes, regulations, and decisional law. As explained in this Staff Report, Air District Staff have reviewed all relevant provisions of state and federal law, and court decisions to the extent applicable, to ensure that the Proposed Amendments are consistent with them. Indeed, one of the primary reasons for adopting the Proposed Amendments is to make sure that the Air District's programs are in fact consistent with applicable legal requirements. For example, the Proposed Amendments will (among other things) ensure that the Air District's NSR program addresses all areas identified by EPA where the current regulations are not fully consistent with federal Clean Air Act requirements, and will also ensure that the District's regulations are consistent with recent legal developments such as the Supreme Court's decision in the *UARG v. EPA* case.
- **Non-Duplication:** This finding requires that the Proposed Amendments must not impose the same requirements as an existing state or federal regulation, unless doing so is necessary and proper to execute powers and duties granted to or imposed upon the Air District. To the extent that the Air District's NSR and Title V programs require stationary sources to obtain pre-construction and operating permits in the same manner as EPA's federal programs, the District's permitting programs are necessary and proper to execute the District's power and duty to implement these requirements in the Bay Area. As discussed above in Section II.A. on the legal framework for NSR and Title V permitting, although Federal law creates these programs and sets forth the minimum requirements for how they are implemented (with additional requirements imposed by State law), the programs

are intended to be implemented primarily by local agencies through their own regulations. The Proposed Amendments will allow the Air District's permitting programs to do so effectively and in accordance with law.

- **Reference:** This finding requires identification of and reference to the provisions of law that will be implemented by the Proposed Amendments. These provisions are those identified and referred to in connection with the "authority" finding above.

Based on the foregoing, there is ample evidence on which the Board of Directors can make the findings required by Health & Safety Code Section 40727.

In complying with these requirements of Health & Safety Code Section 40727, the Air District is required under **Health & Safety Code Section 40727.2** to prepare an analysis identifying all existing federal air pollution control requirements and Air District rules and regulations that apply to the types of sources and equipment that are subject to the Proposed Amendments. As the NSR and Title V permitting programs apply to essentially all sources of air pollution in the Bay Area, the universe of existing federal and District pollution control requirements and rules and regulations that apply to the facilities that may be affected by the Proposed Amendments includes all federal requirements for stationary sources and all Air District requirements. These requirements are numerous, and they are listed in Title 40 of the Code of Federal Regulations, Chapter 1, Subchapter C (Air Programs); and in Air District Regulations 1 through 12.

In addition, under **Health & Safety Code Section 40728.5**, before adopting or amending any regulations that will significantly affect air quality or emissions limitations, the Air District must assess any potential socioeconomic impacts from the adoption or amendment, to the extent that data are available. Section 40728.5 defines socioeconomic impacts to include the following elements:

- Businesses Affected: NSR and Title V permitting address a wide variety of stationary sources in the Bay Area. The Air District currently has approximately 8,000 permitted facilities, and the Proposed Amendments could potentially affect any or all of them. Most aspects of the NSR and Title V permitting programs will not be affected by the Proposed Amendments, of course, and so many of these facilities will not see any change in the specific provisions that apply to them. Moreover, most of the substantive requirements of these permitting programs apply only to new and modified sources, and so how any particular business may be affected will depend upon that business's plans for adding new sources or modifying its existing sources in the future. As such, it not possible to determine specifically how the Proposed Amendments will affect any particular operation or any particular type of business or segment of industry. There is no data or other information available on which one could make such a determination at that level

of specificity. As a general matter, however, for any business or industry segments that may be affected, the effects are not expected to be significant.

- Impact on Employment and the Economy: For the same reasons that it is not possible to state with specificity exactly what businesses will be affected by the Proposed Amendments or exactly how any particular business or industry segment will be affected, it is not possible to quantify the extent of any potential impacts on employment and the economy. To the extent that there are any such impacts, however, they are not likely to be extensive. As outlined in Section V. above, the Proposed Amendments are not expected to impose significant additional compliance costs, and they are not expected to require affected facilities to have to hire any additional staff or to impose substantial costs that will have any adverse impact on the region's economy.
- Range of Probable Costs of Regulation: It is similarly not possible to quantify with any specificity the range of probable costs associated with the Proposed Amendments, if any. Any additional regulatory costs are expected to be minimal, and are not expected to impose any significant cost burdens on regulated entities. Beyond this general level of cost impact projection, is not possible to estimate exactly where within the range of zero to less-than-significant the costs may fall.
- Availability of Cost-Effective Alternatives: There are no alternatives that will satisfy the goals and objectives of the Proposed Amendments with less cost. The bulk of the revisions being made by the Proposed Amendments are legally required in order for EPA to be able to fully approve the Air District's permitting programs, and the District has no viable alternative but to make them. Furthermore, the Proposed Amendments are not expected to impose any significant compliance costs as explained in Section V. As such, even if there were available alternatives, they would not involve any significant reduction in compliance costs.
- Emission Reductions: As discussed in Section V., it is not possible to specify with any certainty the extent of any emission reductions that will be gained specifically because the Proposed Amendments. The Proposed Amendments present technical and administrative revisions to the current rules, and these revisions will not substantially change the scope or substantive requirements of the Air District's permitting programs. As such, the Proposed Amendments are not expected to directly create any significant emission reductions. They are intended to address the regulatory mechanisms through which the programs are implemented, which is an important consideration from the perspective of administering the programs effectively, but they will not have any significant direct effect on the amount of air emissions from regulated facilities in the Bay Area.

- Necessity: As noted above in connection with Section 40727, the Proposed Amendments are necessary to implement changes to the current rules required by EPA for full approval of the NSR program under the federal Clean Air Act, to address certain issues identified by Air District staff to ensure that the permit regulations function as effectively as possible, and to align the regulations with recent legal developments. These reasons why the Proposed Amendments are necessary are discussed in detail in Section III.

Section 40728.5 requires the Board of Directors to consider the socioeconomic impact of the Proposed Amendments, and to make a good faith effort to minimize any adverse socioeconomic impacts associated with them. In light of the discussion above, District Staff have concluded that the Proposed Amendments will not have any significant adverse socioeconomic impacts. This conclusion is also based (in part) on the socioeconomic impact analysis prepared by Applied Development Economics, which is incorporated herein. Staff submit that adoption of the Proposed Amendments constitutes the most effective way to further the Air District's goals of implementing the state and federal NSR and Title V permitting requirements with the minimum amount of socioeconomic impact possible.

B. California Environmental Quality Act Requirements

The Proposed Amendments have been prepared to ensure that the Air District can effectively implement two important Clean Air Act permitting programs, which will help ensure that District regulations are complied with, that air pollution is reduced, and that the region's clean air goals are achieved. As such, the Proposed Amendments will help support positive environmental benefits. The Air District is still required to evaluate the potential for the Proposed Amendments to have ancillary negative environmental impacts, however, notwithstanding these positive air quality benefits. This requirement is imposed by the California Environmental Quality Act ("CEQA"), Pub. Res. Code § 21800 *et seq.*, as well as the CEQA Guidelines that have been adopted to help implement the statutory provisions of CEQA.

To address these requirements under CEQA, the Air District contracted with Environmental Audit, Inc., an environmental consultant, to prepare a CEQA Initial Study to evaluate the potential for significant adverse environmental impacts as a result of the Proposed Amendments. This Initial Study is being published in conjunction with this Staff Report and the Proposed Amendments. The Initial Study found that there is no substantial evidence suggesting that the Proposed Amendments will have any significant adverse environmental impacts. Accordingly, District staff have prepared a proposed Negative Declaration under CEQA for consideration by the Board of Directors.

Air District staff will present the proposed Negative Declaration for consideration by the Board of Directors, along with the Initial Study, all of the supporting information in the record, and any comments from interested members of the public. After considering all of this information, if the Board determines in its own independent judgment there is no substantial evidence that the project will have a significant effect on the environment, it may adopt the Negative Declaration to support its approval of the Proposed Amendments. Interested members of the public are encouraged to review and comment on the Initial Study and proposed Negative Declaration, and to provide any comments to Air District staff and to the Board of Directors.

C. BAAQMD Cost Recovery Policy

The Air District is also required under the Cost Recovery Policy adopted by the Board of Directors on March 7, 2012, to ensure that any new regulatory amendments recover their costs through fees. District staff considered the potential cost impacts to the Air District as a result of the Proposed Amendments and found them to be minimal. The Proposed Amendments will make only minor revisions to the way District staff implement the NSR and Title V permitting programs, and they are not expected to generate any substantial additional work for District permitting or other staff, above what staff are already required to do under the existing programs. There is no need for any new or revised regulatory fees associated with the Proposed Amendments.

VII. PUBLIC ENGAGEMENT AND PUBLIC COMMENTS

The Proposed Amendments are the product of a year's work by Air District Staff with input from a large number of interested stakeholders, including EPA Region IX and ARB staff, representatives from the regulated community and industry groups, representatives from environmental and advocacy organizations, and interested members of the public. Engagement and participation by these stakeholders has resulted in significant improvements to the Proposed Amendments as they have evolved during this process.

Air District Staff began this process in 2016 after EPA published its limited approval and limited disapproval of the Air District's NSR permit program. As explained in Section II.D., EPA approved the program generally, but identified a number of areas where the Air District needs to make certain revisions to be fully consistent with the federal Clean Air Act. Air District staff prepared draft revisions to address these identified deficiencies, and then met with EPA Region IX staff to ensure that they satisfied EPA's concerns. Air District staff also conferred with Air Resources Board staff as part of this process to ensure that the draft revisions satisfied California statutory requirements as well.

When the draft revisions were complete, Air District staff circulated them for public review and comment. Staff published the drafts on May 11, 2017, accompanied by a 45-page Workshop Report that provided a detailed summary and an explanation of the reasons for the proposed revisions and what they would accomplish. Air District staff published the Workshop Report and draft regulatory amendments on the District's website, and also sent notification by US mail and by email to all contacts on the District's lists of potentially interested parties.

Air District staff then held a series of public workshops in June of 2017 to engage with interested members of the public. The public workshops included a presentation by Air District staff explaining the reasons why the District was proposing the regulatory revisions; what the revisions would involve; and what the revisions would mean for affected facilities, for air quality in the Bay Area, and for the public at large. The staff presentation was then followed by an open question-and-answer and discussion forum, which allowed staff to engage in a discussion with the attendees to provide additional information and get public input and feedback. The dates and locations of the public workshops are summarized below:

Rule Development Public Workshops

Date:	Location:
June 12, 2017	Air District Headquarters 375 Beale Street San Francisco, CA
June 12, 2017	City of Martinez City Council Chambers 525 Henrietta Street Martinez, CA
June 13, 2017	City of Fremont Family Resource Center Millennial Room – Suite A120 39155 Liberty Street Fremont, CA

Each of the public workshops was also webcast to allow interested members of the public to attend remotely. In addition, Staff also made an archived webcast available on the Air District's website for later viewing by any interested members of the public who were not able to attend at the time of the live presentation. Over 50 people attended the workshops in person, with over 20 more participating in the webcasts.

Air District staff also solicited written comments on the drafts published at the workshop stage. Staff scheduled the close of the comment period to be two weeks after the public workshops to allow interested members of the public to be able to attend the workshops and engage in an initial discussion of the draft revisions, and then still have time to go back and finalize their input in the form of written comments. District Staff also made themselves available throughout the process by phone and in person to answer questions, explain issues, and receive input from members of the public. District staff have had a large number of communications – by telephone, by email and in person – with interested members of the public during this process.

Air District staff received important public feedback from this workshop process, and staff wish to thank all who took the time to provide input. Staff have prepared written responses to the comments received, which are provided in Appendix B to this Staff Report. Based on the comments, District staff have made further revisions to the initial drafts, which are reflected in the final version of the Proposed Amendments that staff are proposing for adoption by the Board of Directors.

Based on this public process, Air District staff initially published a final version of the Proposed Amendments on August 25, 2017, which staff noticed for a public hearing before the Air District's Board of Directors on October 18, 2017. After that initial publication, however, two further developments gave rise to a need to make further revisions to the Proposed Amendments.

First, Air District staff completed a series of discussions with EPA Region IX staff regarding their approach to for calculating the amount of offset required when a major source is modified, which is different from how the Air District calculates offsets as described in Section III.A.8. above. After further discussion with EPA Region IX staff, Air District staff have realized that the Air District can address this difference through the "offsets equivalence demonstration" procedure outlined in Section III.A.8. Air District staff have therefore made additional revisions to the drafts published on August 25, 2017, for this purpose.

Second, EPA published its proposed conditional approval of the 2012 revisions to the emissions banking provisions in Regulation 2-4 on September 14, 2017.[14] EPA identified certain additional deficiencies in Regulation 2-4 that were not addressed in the drafts of the Proposed Amendments published on August 25, 2017. Air District staff have addressed these deficiencies in the drafts being published today, as discussed in Section III.A.10. Adopting these banking revisions will allow EPA's proposed conditional approval to be converted to a full (unconditional) approval.

The Proposed Amendments reflect both of these further revisions to the versions that were published on August 25, 2017. Air District staff are re-publishing the Proposed Amendments with these revisions, and will propose that the District's Board of Directors consider them for adoption at the public meeting scheduled for December 6th, 2017. These further revisions are discussed in detail in Sections III.A.8. and III.A.10. of this Staff Report. Air District staff have also updated the CEQA Initial Study and Proposed Negative Declaration and the socioeconomic impact analysis for the Proposed Amendments to reflect these further revisions (although the conclusions reached in those documents have not changed as these further revisions are relatively minor). Air District staff are also re-noticing the Proposed Amendments in conformance with all applicable noticing requirements to ensure that all interested members of the public have full notice of all aspects of the Proposed Amendments, including these two additional revisions that staff have made since August 25, 2017.

Interested members of the public are encouraged to submit comments on the Proposed Amendments. Written comments should be addressed to Greg Stone, Bay Area Air Quality Management District, 375 Beale Street, Suite 600, San Francisco, CA 94105. Written comments also can be sent by e-mail to gstone@baaqmd.gov. **Written comments on the proposed amendments will be received during the period from Friday, October 13th, 2017, until 5:00 p.m. on Monday, November 13th, 2017.**

[14] *See supra*, fn. 4.

Interested members of the public can also submit comments at the public hearing scheduled for December 6th, 2017. **Note that the Air District will consider all comments received on the earlier version of the Proposed Amendments published in August, 2017, in addition to comments on the current version. Members of the public do not need to re-submit any comments that they submitted on the earlier version.**

VIII. CONCLUSION AND STAFF RECOMMENDATION

For the reasons discussed in the foregoing Staff Report, Air District Staff recommend that the Board of Directors adopt the Proposed Amendments. The Proposed Amendments have met all applicable legal requirements for adopting amendments to District regulations, including both substantive and procedural requirements. The Proposed Amendments have also been developed in coordination with interested stakeholders and have incorporated helpful comments received from members of the public. The Proposed Amendments will strengthen the Air District's NSR and Title V permitting programs and ensure that they can be implemented consistently and efficiently. The Proposed Amendments will also allow EPA to fully approve the Air District's programs under the Clean Air Act.

Air District Staff respectfully submit that the Board of Directors should exercise the legal authority granted to it by legislature of the State of California under the Health and Safety Code and the adopt the Proposed Amendments as the policy and regulations of the Bay Area Air Quality Management District. To do so, Staff recommend that the Board of Directors approve the following two actions:

- Adoption and Approval of a "Negative Declaration" under the California Environmental Quality Act finding and declaring that, in the independent judgment and analysis of the Board, and based on the entire record including the CEQA Initial Study prepared for the Proposed Amendments and any and all public comments received, there is no substantial evidence that the Proposed Amendments will have a significant adverse effect on the environment.
- Adoption of the Proposed Amendments, as set forth in Appendix A hereto.