



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

## **WORKSHOP REPORT**

FOR

**PROPOSED REVISIONS TO:**

**Regulation 2, Rule 1 (Permits – General Requirements)**

**Regulation 2, Rule 2 (Permits – New Source Review)**

**and**

**Regulation 2, Rule 6 (Permits – Major Facility Review)**

May 2017

The Bay Area Air Quality Management District (Air District or District) is considering a number of revisions to its New Source Review and Title V permitting regulations. This document provides a summary of the changes under consideration in advance of a series of public workshops that will be held in June of 2017. Members of the public are invited to review the changes being considered and to attend the workshops to learn more about them. Members of the public are also invited to submit comments on the changes, either in writing or orally at the public workshops. Written comments must be received by **June 26, 2017**. Further information about the public process for developing and adopting these regulatory revisions is provided at the end of this document. Additional information, including the specific dates and locations of the public workshops, is also available on the Air District's website at [www.baaqmd.gov](http://www.baaqmd.gov), or by contacting Azibuike Akaba at (415) 749-8603 or [aakaba@baaqmd.gov](mailto:aakaba@baaqmd.gov).

**TABLE OF CONTENTS**

- I. EXECUTIVE SUMMARY ..... 1**
  
- II. REGULATORY BACKGROUND ..... 3**
  - A. The Federal and State Regulatory Context ..... 3**
    - 1. New Source Review ..... 3*
    - 2. Title V ..... 4*
  - B. The Air District’s NSR Pre-Construction Permitting Program..... 5**
    - 1. NSR Applicability – New and “Modified” Sources..... 5*
    - 2. Substantive NSR Requirements..... 5*
    - 3. Historical Development of the Air District’s NSR Program ..... 7*
  - C. The Air District’s Title V Operating Permit Program ..... 8**
  - D. Developments Since the Most Recent Amendments to the NSR and Title V Programs in 2012 ..... 9**
  
- III. REVISIONS BEING CONSIDERED ..... 10**
  - A. Ensuring That Refinery Crude Slate Changes Comply With New Source Review Permitting Requirements..... 10**
    - 1. Concerns About Crude Slate Changes and Compliance With NSR Requirements..... 10*
    - 2. Proposal To Enhance NSR Enforcement Mechanism To Target Crude Slate Changes..... 11*
    - 3. Regulatory Revisions Necessary To Implement The Proposal ..... 12*
  - B. Making The “Best Available Control Technology” Requirements More Stringent For NSR Permitting Of Greenhouse Gas Emissions Sources .... 15**
    - 1. Reasons For Lowering The GHG BACT Threshold ..... 15*
    - 2. What The New, Lower GHG BACT Threshold Would Require..... 19*
    - 3. Regulatory Revisions To Implement New BACT Threshold ..... 21*
  - C. Revisions to Address “Deficiency Items” Identified by EPA..... 22**
    - 1. Agricultural Source Terms..... 22*
    - 2. Federal Regulatory Terms Incorporated by Reference in “Federal Backstop” Test ..... 24*
    - 3. Making PSD Requirements Applicable to Major Sources of Non-Attainment Pollutants ..... 25*
    - 4. Requiring EPA Approval To Use Alternative Computer Models for Air Quality Analysis..... 26*
    - 5. Facility Categories For Which Fugitive Emissions Must Be Included in PTE Calculations..... 27*

6. Requirement to Evaluate Impacts on Class I Areas .....	28
7. Time Limits for Providing Offset Refunds .....	29
8. Offsets Equivalency Demonstration .....	30
9. Emission Reduction Credit for Shutting Down “Fully Offset” Sources .....	31
<b>D. Refinements to NSR Regulations to Address Concerns Raised by Air District Staff Based on Recent Experience in Implementing the 2012 Amendments .....</b>	<b>32</b>
1. Section 2-1-218 – Definition of “Regulated Air Pollutant” .....	32
2. Section 2-1-413 – Time Limits On Operation of Sources Under Multiple-Location Permits .....	33
3. Calculation of Emissions Increases That Trigger the “Best Available Control Technology” Requirement in Section 2-2-301 .....	34
4. Sources Operated By Agents/Contractors On Behalf of Facility Owners .....	36
<b>E. Revisions to NSR and Title V Regulations to Address the Supreme Court’s UARG v. EPA Decision .....</b>	<b>36</b>
<b>IV. EMISSION REDUCTION AND COMPLIANCE COST IMPACTS .....</b>	<b>38</b>
A. Review of Significant Crude Slate Changes.....	38
B. More Stringent “Best Available Control Technology” Requirements For Greenhouse Gas Permitting .....	39
C. Revisions to Address “Deficiency Items” Identified by EPA.....	41
D. Refinements to Address District Staff Concerns From Recent Experience in Implementing the 2012 Amendments .....	42
E. Revisions to Regulation 2, Rule 6, to Address the UARG v. EPA Decision	42
<b>V. REGULATORY ANALYSIS REQUIREMENTS .....</b>	<b>43</b>
A. California Health & Safety Code.....	43
B. California Environmental Quality Act .....	43
<b>VI. PUBLIC PARTICIPATION AND COMMENT OPPORTUNITIES .....</b>	<b>44</b>
A. Next Steps in the Rule Development Process .....	44
B. Opportunities For The Public To Get Involved .....	45

## I. EXECUTIVE SUMMARY

The Air District is currently considering making amendments to two important District permitting programs, the “New Source Review” pre-construction permit program and the Title V “Major Facility Review” operating permit program.

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 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, a number of developments have given rise to a need to consider further revisions to enhance the effectiveness of these permit programs. Air District staff are therefore considering several additional changes at this time.

The most important revisions involve the NSR program. The Air District is considering **two significant substantive changes** to how the NSR Program works:

- **The first change** would apply to petroleum refineries, and it is intended to help ensure that refineries comply with all applicable NSR permitting requirements when they change the type of crude oil that they process – what is known as the refinery’s “crude slate.” A refinery is subject to NSR permitting requirements if any physical or operational change associated with moving to a new crude slate will result in an increase in emissions such that the change constitutes a “modification” as defined in the regulations. A concern has arisen that refineries may be changing their crude slates in a way that constitutes a “modification” without applying for or obtaining an NSR permit, and without satisfying the NSR requirements applicable to such a modification. District Staff are therefore considering a provision that

would require a refinery to obtain a permit for *any* significant change in crude slate, whether the refinery believes that it is a “modification” subject to NSR or not. This would force refineries to submit a permit application providing the details of any such change in crude slate, which would allow the Air District to review the change and to determine whether it does in fact trigger the NSR requirements. Requiring a review of all such significant crude slate changes will allow the Air District to evaluate such changes in detail and ensure that they will comply with all applicable NSR permitting requirements.

- **The second change** would apply to all regulated facilities, not just petroleum refineries. This change would lower the threshold at which facilities must implement the “Best Available Control Technology” (BACT) to control their Greenhouse Gas (GHG) emissions when they install new equipment or upgrade their existing equipment. When the Air District adopted its GHG BACT requirement into its NSR program, it incorporated the applicability threshold that EPA developed for the federal NSR program, which is 75,000 tons per year CO<sub>2</sub>-equivalent emissions (tpy CO<sub>2</sub>e). Air District staff now believe a more stringent threshold is appropriate for NSR permitting in the Bay Area. Air District staff are therefore considering lowering the BACT applicability threshold to 25,000 tpy CO<sub>2</sub>e for purposes of the District’s NSR program.

In addition to these two substantive changes, the Air District is also considering **a number of more minor revisions that are largely technical and administrative in nature**. These revisions would:

- Make a number of corrections that EPA has requested as a result of its review of the District’s 2012 updates to the regulations. These revisions are required to allow EPA to fully approve the District’s NSR program under the federal Clean Air Act.
- Address certain areas where there needs to be some additional refinement to the 2012 updates, based on staff’s experience in implementing the 2012 updates since they took effect. These revisions would ensure that the District’s NSR program properly reflects the intent behind the 2012 updates.
- Address the U.S. Supreme Court’s decision in *Utility Air Regulatory Group v. EPA* (134 S.Ct. 2427 (2014)), which interpreted several relevant provisions of the federal Clean Air Act regarding the Act’s NSR and Title V program requirements. These revisions would align the District’s rules with the Supreme Court’s ruling

Although these revisions are relatively minor, they are important to ensure that the Air District’s NSR and Title V programs function properly from a legal standpoint.

This Workshop Report summarizes all of the revisions currently under consideration. Section II of the Workshop Report provides additional background information on the Air District’s NSR and Title V permitting programs. Section III then

describes in detail what each of the various revisions under consideration would entail, and Section IV summarizes the emission reductions and compliance costs that would be involved. The Workshop Report concludes with Section V, which addresses several required regulatory analyses; and Section VI, which provides additional information on next steps and how interested members of the public can get involved and provide comments.

## **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 three are the subject of the revisions currently under consideration. The first is Regulation 2, Rule 1 (Regulation 2-1), which establishes the general requirements that govern all of the permitting provisions in Regulation 2. The second is Regulation 2, Rule 2 (Regulation 2-2), which contains the specific regulatory provisions that implement the Air District's NSR pre-construction permitting program. The third is 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 revisions under consideration.

### **A. The Federal and State Regulatory Context**

The Air District's New Source Review and Title V programs are District regulations, adopted to satisfy federal and state requirements that govern how these 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 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 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. It 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 “grandfathered” 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.<sup>1</sup> 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.

### *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

---

<sup>1</sup> 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.

pollutants for which EPA has designated the region as not being 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 EPA has designated the region as being in attainment of the applicable standards (“attainment pollutants”), the substantive requirements are generally somewhat less stringent, as the region’s air quality problems 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 on new and modified sources.

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 (available at [www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/reg-02/rg0202.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/reg-02/rg0202.pdf?la=en)).

### 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<sub>2.5</sub>). PM<sub>2.5</sub> 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<sub>2.5</sub> in 2006, and in 2009 EPA designated the Bay Area as "non-attainment" of the PM<sub>2.5</sub> standards. The December 2012 amendments added permitting requirements for PM<sub>2.5</sub> 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.

Adopting PSD provisions was particularly important because PSD is the element of the NSR program under which greenhouse gases (GHGs) are regulated. EPA began regulating GHG emissions from stationary sources under this program in 2011. When the Air District adopted its own PSD provisions in December 2012, it incorporated EPA's approach to GHG regulation. An important part of the amendments currently under consideration by the Air District is to lower its requirements for the implementation of the

Best Available Control Technology requirements for GHG emissions sources below the EPA's threshold it adopted in 2012. That EPA threshold is set at 75,000 tpy CO<sub>2e</sub>.

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 2012 Amendments took effect on August 31, 2016, after approval by EPA as being consistent with the federal NSR program requirements.<sup>2</sup>

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

As noted above, the Title V operating permit program 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 (available at [www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/reg-02/rg0206.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/reg-02/rg0206.pdf?la=en)).

The 2012 amendments affected the Title V regulations primarily with respect to GHG emissions. As noted above, EPA began regulating GHG emissions in 2011, and it took the position that doing so meant that GHG emissions sources needed to be subjected to Title V operating permit requirements. 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<sub>2e</sub> 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.

---

<sup>2</sup> 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).

#### **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. These recent developments have driven the need for further amendments to Air District permitting programs as discussed in this Workshop Report.

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 Air District's NSR program as a general matter, but subject it to a "limited disapproval" requiring the correction of certain specific "deficiencies".<sup>3</sup> 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 February of 2018). If the Air District does not do so, EPA has the authority to impose sanctions on the Bay Area and to step in to implement NSR federally within the region. One reason for the revisions currently under consideration is to respond to EPA's limited disapproval.

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 subject to permitting requirements under either program. The revisions the Air District is considering to its NSR and Title V programs address this issue..

In addition to these regulatory developments, Air District staff have also benefitted from further experience in evaluating GHG emissions from facilities in the Bay Area and in implementing the regulations as revised in 2012. The further revisions currently under consideration are the result of this experience as well, as discussed further in the next section.

---

<sup>3</sup> See *ibid.*

### **III. REVISIONS BEING CONSIDERED**

This section provides a detailed description of each of the various revisions that the Air District is considering.

#### **A. Ensuring That Refinery Crude Slate Changes Comply With New Source Review Permitting Requirements**

The first major substantive revision that the Air District is considering is designed to ensure that refineries comply with applicable NSR permitting requirements when they change the crude oil slates that they process. The term “crude slate” refers to the mix of crude oil types that a refinery processes, and it reflects various characteristics of the crude oil such as sulfur content and density. The crude slates being refined by Bay Area refineries have been changing recently, and they are expected to continue to change in the future as California’s crude oil resources in the Central Valley start to become depleted and the state’s refineries look to other sources of crude oil.

##### *1. Concerns About Crude Slate Changes and Compliance With NSR Requirements*

Concerns have been raised that refineries may be making changes associated with moving to new crude slates that are subject to NSR permitting requirements, but without obtaining NSR permits or complying with the substantive requirements of the NSR program (such as implementing the Best Available Control Technology to reduce emissions). This situation could arise where a refinery makes a physical change or change in its method of operations associated with a change in crude slate that results in an emissions increase that is either (i) an increase above current permitted levels or (ii) a significant increase above actual historical emissions. Such a change would be a “modification” as defined in District Regulation 2-1-234, and as such the refinery must obtain an NSR permit under Regulation 2-2 and implement the NSR program requirements before making the change. Concerns have arisen that refineries may be making changes associated with moving to new crude slates that constitute “modifications” under Regulation 2-1-234, but doing so without going through the NSR process.

If a refinery makes such a “modification” associated with crude slate changes without applying for or obtaining an NSR permit, it may be difficult or impossible for the Air District (and the public) to discover that the modification was made. Refineries are large, complex operations, and any modifications associated with crude slate changes may be relatively subtle and not immediately obvious. This situation presents a compliance and enforcement concern, as refineries could make modifications related to

crude slate changes in violation of Regulation 2-2 without ever facing any enforcement action.

## 2. *Proposal To Enhance NSR Enforcement Mechanism To Target Crude Slate Changes*

Air District staff are proposing to address this concern through an enhancement to an enforcement mechanism that already exists in the District's NSR program. This mechanism is the "alteration" permit requirement in Air District Regulation 2-1. It requires facilities to inform the Air District and obtain a permit before making *any* physical change or change in the method of operations that may affect air emissions – whether or not the change is a "modification" that increases emissions. This allows the Air District to review any such change being implemented at a facility and to ensure that it complies with all applicable NSR requirements. Specifically, it allows the Air District to determine if the change will result in an emissions increase, in which case it will be a "modification" as defined in Regulation 2-1-234 and subject to NSR requirements.<sup>4</sup>

The Air District created this mechanism in 2000 in response to earlier concerns that facilities were making modifications subject to NSR requirements without informing the Air District and without obtaining NSR permits. The 2000 revision added the definition of an "alteration" in Regulation 2-1-233, which is defined as a change at a source that does *not* increase emissions and is therefore not a "modification" (which is a change that does increase emissions under Regulation 2-1-234). Regulation 2-1-301 requires facilities to obtain a permit before making either an "alteration" or a "modification," and so a permit is required for all such changes, whether they increase emissions (a modification) or do not increase emissions (an alteration). In this way, *all* changes at a facility that may impact emissions require a permit review, which allows the Air District to review them and determine whether or not they are subject to NSR requirements.

The Air District is now proposing to enhance this enforcement mechanism in order to target refinery crude slate changes. Specifically, the Air District is proposing to require all significant crude slate changes at petroleum refineries to go through this permit review process so that the District can review them and ensure that any modifications comply with Regulation 2-2's NSR requirements. This change would increase the effectiveness of the NSR program and reduce the potential that refineries could be making

---

<sup>4</sup> Specifically, the test for whether a physical change or change in method of operation is a "modification" is (i) whether the change will result in any increase in permitted emissions (or in emitting capacity for sources without a specified permit limit) under subsection 1 of Regulation 2-1-234; and (ii) for major facilities, whether the change will result in a significant net increase over the source's actual historical emissions under subsection 2 of Regulation 2-1-234.

modifications to their processes associated with crude slate changes without complying with applicable NSR requirements.

The Air District is proposing to implement this enhancement by expanding the definition of “alteration” to include any significant crude slate change at a petroleum refinery, even if there is no associated emissions increase. This change would mean that a crude slate change that involves a physical change or change in method of operation that *increases emissions* (either an increase above permitted levels or a significant increase above actual historical emission) would be a “modification,” and a crude slate change that does not would be an “alteration” – *and in both cases the refinery would need to obtain a permit before making the change*. If the refinery believes that the crude slate change will involve an emissions increase that will constitute a “modification,” it can apply for an NSR permit and implement the NSR requirements as it would for any other modification. If the refinery believes that the crude slate change will be an “alteration” and not a “modification” (because it does not involve a physical change or change in method of operations that will increase emissions), the refinery can apply to have the change permitted as an alteration, which is not subject to NSR. The Air District will then review the application to determine whether or not there will in fact be any emissions increase that constitutes a “modification.” If the Air District confirms that there will not be any such increase, it will issue a permit and authorize the change as an alteration. If the Air District finds that there will be an increase subject to NSR review, however, it will require the change to be treated as a modification and will require the refinery to implement the NSR requirements as a condition to implementing the crude slate change.

### 3. *Regulatory Revisions Necessary To Implement The Proposal*

This change would be made through a revision to the definition of “alteration” in Section 2-1-233 to state that any significant crude slate change is an alteration. There would be no need to revise the definition of “modified source” in Section 2-1-234. A crude slate change that constitutes a physical or operational change with an increase in emissions over permitted levels or a significant increase over historical actual emissions levels already falls within the “modification” definition under the existing regulatory language.

Implementing this change would also involve the adoption of a new definition of “significant crude slate change.” Air District staff are proposing to define a significant crude slate change as a significant change in any of the five principal attributes that define what type of crude oil is being processed, which are (i) API gravity (a measure of density); (ii) sulfur content; (iii) vapor pressure; (iv) aromatics content (i.e., percentage content of the aromatic compounds benzene, toluene, ethylbenzene and xylene); and (vi) metals content (i.e., percentage content of the metals iron, nickel and vanadium). The Air District currently collects information on these five attributes of the crude oil processed at Bay

Area refineries under Regulation 12, Rule 15. The District will use this information to monitor the refineries' crude oil supplies and to ensure that they submit permit applications whenever any of these attributes change significantly.

The Air District is proposing to define a “significant” change in these attributes as a change of greater than three standard deviations from the mean values established over a four-year historical baseline period of 2013-2016. Under this proposed approach, the monthly average values for each of the five crude oil attributes referred to in the preceding paragraph will be compared with the mean of the average monthly value of that attribute in the crude oil that the refinery processed over the months from January 2013 through December 2016 (inclusive). If the average monthly value of the crude oil that the refinery processes deviates from the mean by more than three standard deviations, then this will constitute a “significant crude slate change” and therefore an “alteration” that requires Air District approval. Any deviation in the type of crude oil that the refinery has historically processed of more than three standard deviations will therefore be the trigger point at which Air District review will be required to determine whether the crude oil change is subject to the New Source Review program.

The Air District is proposing to use three standard deviations from the 2013-2016 historical mean as the trigger point for requiring this compliance determination because this is the standard approach in statistics for differentiating between what constitutes the ordinary, expected level of variation in a given attribute, and what constitutes a significant change that cannot be explained by normal fluctuations over time.<sup>5</sup> This approach of using three standard deviations – often referred to as the “three sigma” rule – is therefore appropriate for determining whether a refinery has changed its crude oil feedstock in a significant way, or whether it is simply experiencing the normal level of variability that one would expect even without a change in crude oil supply.

In addition to crude oil, the Air District is also proposing to include partially refined intermediate feedstocks that refineries may purchase for further processing at other process units besides their crude units. This aspect of the proposal is designed to address concerns that some refiners may switch to different crude oil sources, but not undertake the initial refining at their Bay Area refinery. Such refiners could undertake the initial refining of the crude oil at a different location, and then ship the partially-refined intermediate to their Bay Area refinery for further processing. To address this concern, the proposed definition also covers the refining of any other type of feedstock received

---

<sup>5</sup> See, e.g., *Schaum's Outline of Business Statistics* (McGraw Hill Professional 2003), p. 359; Erik W. Grafarend, *Linear and Nonlinear Models: Fixed Effects, Random Effects, and Mixed Models* (Walter de Gruyter 2006), p. 553; see also generally D.J. Wheeler & D.S. Chambers, *Understanding Statistical Process Control* (SPC Press 1992); <https://www.qualitydigest.com/aug/wheeler.html>.

from outside the refinery at any other type of process unit – not just crude oil processed at crude units.

Under this approach, a refinery will need to obtain approval from the Air District if it plans to process crude oil (or other feedstock received from outside the refinery) that will differ from what it processed during the 2013-2016 historical baseline period by more than 3 standard deviations from the mean. The monthly average values of what the refinery processed during each month in this four-year baseline period will establish the mean, as well as a permissible window based on three standard deviations above and below the mean. If the refinery intends to process crude oil (or other feedstock received from outside the refinery) that will fall outside of this window (based on average values over any calendar month), then it will need to obtain prior approval from the Air District. If there will be a change that will increase emissions in a manner that constitutes a “modification” subject to the New Source Review program, then the refinery will need to obtain an NSR permit under Regulation 2-2 and implement all applicable NSR regulatory requirements – such as implementing the Best Available Control Technology, providing offsets, etc. If the change is not a “modification,” the refinery will still have to obtain Air District approval as an “alteration,” and the District will have the opportunity to review the situation in detail and independently confirm that there will not in fact be any “modification” subject to NSR permitting requirements.

In a situation where a refinery does intend to change crude slates such that it will depart from the permissible window established by three standard deviations from the 2013-2016 mean, then the permit for that change (either an alteration or a modification) will specify an approved window for continued operation going forward. The refinery will be able to provide the expected range of values of each of the five attributes that it anticipates from its new crude slate and ask the Air District to review and approve that range. When the District does so, it will specify the requested range in the permit documents under which it approves the change, and this new range will govern the refinery’s allowable operations going forward. The proposed definition of “significant crude slate change” provides for this scenario by specifying that the crude oil processed can exceed the three-standard-deviations-from-the-mean window where specifically authorized in a District authority to construct or permit to operate.

Proposed language for these revisions is provided in underline/~~strikeout~~ format in a redline markup of the current language of Section 2-1-233 in the draft revisions to Regulation 2, Rule 1, being published in conjunction with this Workshop Report, as well as a new definition of “significant crude slate change” in new Section 2-1-243.

## **B. Making The “Best Available Control Technology” Requirements More Stringent For NSR Permitting Of Greenhouse Gas Emissions Sources**

The second main substantive revision the Air District is considering involves lowering the applicability threshold for the Best Available Control Technology (BACT) requirement for GHGs to 25,000 tpy CO<sub>2e</sub>, from the current 75,000 tpy CO<sub>2e</sub> threshold. Lowering the applicability threshold will make the requirement more stringent, and will result in a greater number of facilities in the Bay Area being subject to this requirement.

### *1. Reasons For Lowering The GHG BACT Threshold*

As explained above, GHG emissions from stationary sources are regulated by EPA under the PSD element of the federal NSR program. The Air District adopted PSD regulations of its own in 2012, which created PSD requirements in the District’s own NSR program, including the requirement to use Best Available Control Technology to control GHG emissions.

When the Air District adopted its PSD requirements, it incorporated the 75,000 tpy CO<sub>2e</sub> threshold for triggering the Best Available Control Technology requirement from the federal program. Section 2-2-304 in the District’s NSR regulations requires that if a facility is a “major” facility under the federal Clean Air Act, then it must implement the Best Available Control Technology to control its GHG emissions (i) for any new source that will emit 75,000 tpy or more CO<sub>2e</sub>, and (ii) for any modification to an existing source that will result in a net increase in emissions of 75,000 tpy or more CO<sub>2e</sub>. A “major” facility is one that emits 100 tpy or more of a regulated air pollutant other than GHGs (or 250 tpy or more for certain source categories). These facilities are subject to the BACT requirements for GHGs under Section 2-2-304 if they have GHG increases from new or modified sources of 75,000 tpy or more CO<sub>2e</sub>.

The 75,000 tpy CO<sub>2e</sub> threshold that the Air District incorporated from EPA’s PSD program was based on considerations of what proportion of GHG emissions from new and modified stationary sources being permitted would be subject to the BACT requirement under this threshold, and how many such sources would be involved. In adopting this threshold, EPA concluded that 75,000 tpy CO<sub>2e</sub> struck an appropriate balance between (i) applying BACT to a significant proportion of the total GHG emissions from new and modified sources being permitted under the NSR program nationwide; and (ii) not overwhelming permitting authorities and the regulated community with huge numbers of relatively minor sources becoming subject to the administrative and substantive burdens imposed by the PSD permitting requirements. EPA reasoned that a threshold below 75,000 tpy CO<sub>2e</sub> would result in diminishing returns, as the relatively small additional amount of GHG emissions that would become subject to BACT by

regulating a large number of small sources would not be worth the additional burdens of subjecting these sources to the PSD permitting requirements.<sup>6</sup>

When the Air District created its PSD program in 2012, it incorporated EPA's 75,000 tpy CO<sub>2</sub>e threshold based on EPA's consideration of these issues. Since that time, however, it has become apparent that a lower threshold may be appropriate for GHG permitting for the Bay Area. Air District staff believe that the District can adopt a more stringent threshold – one that will require BACT for a greater proportion of GHG emissions from new and modified sources permitted under the Air District's NSR program – without subjecting unreasonable numbers of smaller sources to the requirement.

This conclusion is based on an evaluation of all of the permit applications that the Air District has received over the past ten years. Air District Engineering Division staff reviewed these permit applications in order to estimate the number of projects at Bay Area facilities that would be subject to the BACT requirement at lower threshold levels, and the proportion of GHG emissions from these sources that would be covered. The results of this analysis are shown in Table 1 below. The first column in the table lists six different alternatives for setting the BACT threshold that Air District staff evaluated, from the current 75,000 tpy CO<sub>2</sub>e threshold down to a zero threshold (i.e., all new and modified sources that the Air District permits would have to apply BACT to control their GHG emissions, no matter how small). For each threshold level evaluated, the second column shows the total mass of GHG emissions from new and modified sources permitted each year that would be subject to the BACT requirement at that threshold. (Note that this is not a measure of the total GHG emission reductions that would be achieved, it is the amount of total GHG emissions from all the new and modified sources that the District permits each year that would have to implement BACT. Requiring BACT for these sources has the potential to reduce these emissions somewhat, but it would not eliminate them entirely.) The third column then shows the amount of such emissions as a percentage of the total GHG emissions from all new and modified sources permitted each year. Finally, the fourth column shows the number of new and modified sources that would be covered at that threshold (i.e., sources where the facility would have to apply BACT for the source's GHG emissions).

---

<sup>6</sup> See *Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule*, Final Rule, 75 Fed. Reg. 31,514, 31,533-41 (June 3, 2010).

**TABLE 1 – ESTIMATED EFFECTS OF MORE STRINGENT GHG BACT THRESHOLDS:**

**GHG Emissions from New and Modified Sources Permitted Each Year  
That Would Become Subject to BACT Requirement  
(Based on Historical Trends Over the Past 10 Years)**

<b>GHG BACT Threshold (ton/yr CO<sub>2</sub>e)</b>	<b>New/Modified Source GHG Emissions Subject to BACT (ton/yr CO<sub>2</sub>e)</b>	<b>% of Total New/Modified Source GHG Emissions Subject to BACT (ton/yr CO<sub>2</sub>e)</b>	<b>Number of New/Modified Sources Subject to GHG BACT per year</b>
<b>75000</b>	22,614,601	80%	18
<b>50000</b>	23,762,711	84%	21
<b>30000</b>	25,088,060	89%	31
<b>25000</b>	<b>25,522,937</b>	<b>90%</b>	<b>35</b>
<b>10000</b>	27,021,774	95%	57
<b>0</b>	28,310,446	100%	488

Source: BAAQMD Engineering Division memorandum, *Greenhouse Gas PSD/BACT Threshold Analysis* (April 2017)

Note: GHG emissions numbers are total emissions from sources that would have to apply Best Available Control Technology, not total GHG emission *reductions* that would be achieved by applying BACT at the source. Applying BACT to these emissions would have the potential to achieve some reductions, but it would not eliminate them entirely.

This analysis demonstrated that a 25,000 tpy CO<sub>2</sub>e threshold would strike the most appropriate balance between the emission reduction benefits of subjecting a greater proportion of GHG emissions to the BACT requirement, and the additional burdens of having to apply BACT for large numbers of relatively inconsequential smaller sources. A 25,000 tpy threshold would increase the percentage of GHG emissions subject to BACT from 80% under the current 75,000 tpy threshold to 90%, which would represent a significant extension in the reach of the regulation. At the same time, it would nearly double the number of new and modified sources permitted each year that would be subject to the BACT requirement, from 18 per year under the current 75,000 tpy threshold to an estimated 35 per year under a 25,000 tpy threshold. This would be a significant increase in administrative burden on the Air District in processing BACT determinations for these sources, not to mention an increased burden on the facilities that may have to implement BACT control technologies as a result. But District staff believe that this increased burden will be manageable, and can be justified in order to increase the amount of GHG emissions from new and modified sources that will be subject to BACT.

The alternatives that Air District staff evaluated at levels higher than 25,000 tpy CO<sub>2</sub>e are less appropriate because they would not cover as many new and modified sources and would therefore not require BACT for the same amount of GHG emissions. As the table shows, in addition to the alternative of leaving the threshold at the current 75,000 tpy CO<sub>2</sub>e, District staff also considered an intermediate threshold of 50,000 tpy CO<sub>2</sub>e, which have only a small increase in terms of the number of additional sources

subject to BACT each year (an increase from 18 to 21), but would not achieve the same impact in terms of expanding the amount of emissions from these sources that would be subject to the BACT requirement (an increase to only 84%). In addition, the Air District also evaluated the alternatives that have been proposed by EPA for the federal PSD requirements, which include (i) leaving the threshold at 75,000 tpy CO<sub>2e</sub>, and (ii) reducing it to 30,000 tpy CO<sub>2e</sub>. 75,000 tpy is EPA's preferred proposal, and while that would not increase the burdens of implementing the BACT requirement at all, it would not extend the coverage of the GHG BACT requirement at all, either. 30,000 tpy is the other alternative that EPA has identified as a potential option, although the agency has concluded preliminarily that it is too stringent and would not be appropriate for the federal program.<sup>7</sup> District staff believes that a 30,000 tpy threshold would be too stringent for the Bay Area, as it could increase the coverage of the BACT requirement to 89% of permitted emissions with less than a doubling of the number of sources that would be covered. But as noted above, it would be appropriate to go even further, to 25,000 tpy, to achieve 90% coverage with only a few more sources per year affected.

District staff also considered alternatives below 25,000 tpy CO<sub>2e</sub>, but reducing the threshold further faces the problems of steeper increases in the administrative burdens in implementing BACT, coupled with diminishing returns in the potential for achieving further GHG emission reductions. The lower the threshold is set, the more it will cover smaller sources with relatively minor GHG emissions, which are much more numerous, and for which it is harder to achieve meaningful emission reductions. Going to 10,000 tpy CO<sub>2e</sub>, for example, will more than triple the number of sources for which BACT will have to be implemented; and going to a 0 tpy CO<sub>2e</sub> threshold will encompass over four hundred additional sources. At the same time, requiring BACT for these smaller sources has less likelihood of achieving actual substantive emission reductions, as it is less likely that technologies will be available to effectively reduce emissions from sources of this size. The likelihood that a technology can be installed or implemented at a source to reduce its GHG emissions is highest for large sources, which are usually custom-designed specifically for a given application. For these types of sources, a facility can incorporate GHG emission reduction features into the design, which increases the likelihood that there will be effective technological solutions to achieve meaningful reductions. Smaller sources are more likely to be built with stock equipment and off-the-shelf technologies, which do not provide the same level of opportunity to incorporate significant emission reductions. For all of these reasons, it does not appear at this time that the diminishing benefits of reducing the GHG BACT threshold below 25,000 tpy CO<sub>2e</sub> would outweigh the increasing burdens of doing so.

---

<sup>7</sup> See *Revisions to the Prevention of Significant Deterioration (PSD) and Title V Greenhouse Gas (GHG) Permitting Regulations and Establishment of a Significant Emissions Rate (SER) for GHG Emissions Under the PSD Program*, Proposed Rule, 68,110, 68,124-38 (Oct. 3, 2016).

Finally, Air District staff are proposing to make this 25,000 tpy CO<sub>2e</sub> threshold apply at all facilities, not just facilities that have emissions of regulated air pollutants over the 100/250 tpy federal “major” facility threshold, which is a limitation in the federal requirement. EPA’s federal program has to incorporate this threshold because it is required under the Clean Air Act, which limits NSR applicability to major facilities, as the Supreme Court discussed in the *UARG v. EPA* case. But there is no reason why the Air District cannot adopt the more stringent approach under its rulemaking authority under the California Health and Safety Code. Air District staff believe that it would be appropriate to do so here, as GHG emissions have the same impact on global climate change whether they come from a facility above the “major” facility threshold or below it.

## 2. *What The New, Lower GHG BACT Threshold Would Require*

The new lower threshold will require more sources to implement the “Best Available Control Technology” (as defined in the regulations) to limit their GHG emissions. But as with the existing BACT requirement, the regulations will not prescribe exactly what technology must be applied in any particular case. As with the current regulations, that determination will be made on a case-by-case basis by evaluating the most stringent level of GHG emissions control that can feasibly be implemented for each individual source being permitted, taking into account considerations such as energy impacts, any ancillary environmental impacts, and economic impacts. For each source, the District will evaluate available technologies and determine which one must be implemented as required under the definition of set forth in Section 169 of the Clean Air Act, which provides (in pertinent part) as follows:

The term “best available control technology” means an emission limitation based on the maximum degree of reduction of [greenhouse gas emissions] . . . which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.

(CAA § 169(3), 40 U.S.C. § 7479(3).)

This approach of evaluating the Best Available Control Technology for each individual source on a case-by-case basis is important because it provides flexibility to tailor the control technology and emissions limitations required for each individual source to the specific circumstances of that source. It is preferable to a “one size fits all” approach of specifying a certain type of control technology or emissions limit that all sources within a particular source category must implement for a number of reasons. One reason is that

under a “one size fits all” approach, the regulatory requirements must be set at a level that can be achieved by all sources within the source category being regulated. As a result, some individual sources within that category that can do better are not required to do so, even if it would be feasible. The case-by-case BACT approach ensures that each source will have individually tailored emissions control requirements that ensure it is limiting emissions as much as possible. Another reason is that prescriptive “one size fits all” requirements have to be formally revised whenever new technological advances are developed in order to incorporate them into the regulatory requirements. The case-by-case BACT approach requires that such new technologies be implemented as soon as they become available, without any need for the agency to develop new regulations. This feature of the BACT requirement has been called “technology-forcing,” because it encourages equipment manufacturers to develop new pollution control technologies by guaranteeing a market for them once they become commercially available, and because it automatically updates the applicable control requirements without the need for formal regulatory revisions. The BACT requirement for GHGs will work this way under the revised 25,000 tpy CO<sub>2</sub>e threshold, just as it does under the current threshold.

For GHGs, this technology-forcing aspect of the BACT requirement means that new and modified GHG sources over the 25,000 tpy CO<sub>2</sub>e threshold will have to implement the most effective GHG control approaches and techniques that are available at the time of permitting. In some cases, this may mean using add-on control technologies to prevent GHGs generated by a source from being emitted into the atmosphere. Carbon Capture and Storage (CCS), for example, is an emerging technology that takes greenhouse gases emitted from a facility and pumps them into an underground geological formation in order to prevent them from being emitted into the atmosphere where they can contribute to global warming. Where add-on control technologies like this are developed and become commercially available as a means of achieving effective GHG emission reductions, facilities will have to incorporate them into the design of their new and modified sources under the BACT requirement.

Add-on control technologies will not be available or feasible for all sources, however, and they will not be required as BACT in those situations. In cases where such control technologies are not feasible, the BACT requirement for GHG emissions will be implemented primarily through using the most GHG-efficient technology available. In other words, in cases where an add-on control device or technology is not feasible, the best alternative will be to use the most efficient equipment available so that the source can achieve its required level of performance with the least amount of GHG emissions. For example, BACT could be implemented in such situations by requiring a power plant to use the most efficient combustion turbines to generate a given number of megawatts of electricity for the power grid with the lowest feasible amount of GHG emissions. Similarly, BACT could be implemented by requiring a refinery to design and tune a steam

boiler so that it can generate a given amount of steam with the lowest feasible amount of GHG emissions. This is primarily how BACT is being implemented currently under the existing 75,000 tpy CO<sub>2e</sub> threshold, given the limited scope of add-on control technologies that are currently available. District staff envision that this will continue to be the situation under the revised 25,000 tpy CO<sub>2e</sub> threshold for a significant proportion of new and modified sources, at least until new technologies become more widely available. As new and emerging technologies come to fruition, however, they will be required for all new and modified sources over the 25,000 tpy CO<sub>2e</sub> threshold.

### 3. *Regulatory Revisions To Implement New BACT Threshold*

The Air District is proposing to implement this new 25,000 tpy CO<sub>2e</sub> threshold by creating a new subsection in Section 2-2-304, the provision in Regulation 2-2 that sets forth the PSD BACT requirement. Section 2-2-304 as enacted in the December 2012 amendments incorporates the federal PSD BACT requirement by reference, including the 75,000 tpy CO<sub>2e</sub> thresholds discussed above. The proposed revisions would create two subsections in Section 2-2-304: (i) Subsection 2-2-304.1, which would continue to incorporate the federal PSD BACT requirement by reference; and (ii) Subsection 2-2-304.2, which would be the new requirement to apply BACT at the lower threshold of 25,000 tpy CO<sub>2e</sub>.

New and modified sources would be subject to both of these subsections based on the applicability threshold set forth in each subsection. A facility with a new or modified source that will increase GHG emissions over the 25,000 tpy CO<sub>2e</sub> threshold in Subsection 304.2 would be subject to the federal BACT requirement under that subsection and would have to implement the Best Available Control Technology to control its GHG emissions. A facility with emissions of regulated air pollutants over the federal 100/250 tpy “major” facility threshold with a new or modified source that will increase GHG emissions over the federal 75,000 tpy CO<sub>2e</sub> threshold would also be subject to Subsection 304.2, would have to implement the federal BACT requirements under that provision as well.

There are several reasons for this bifurcated approach to revising Section 2-2-304. One reason is that the Air District will still have to incorporate the federal PSD BACT requirements (with its 75,000 tpy CO<sub>2e</sub> threshold) so that the Air District’s program will continue to satisfy the minimum federal requirements under the Clean Air Act. Retaining the incorporation-by-reference of the federal program requirement in Subsection 2-2-304.1 ensures that EPA will continue to be able to approve the Air District’s NSR program as consistent with the Clean Air Act. A second reason is that EPA Region IX staff have informed Air District staff that EPA will not be able to approve any GHG BACT requirement that eliminates the 100/250 tpy federal “major” facility threshold that was mandated by the Supreme Court in the *Utility Air Regulatory Group v. EPA* case, which this proposal would

do. Having the lower 25,000 tpy CO<sub>2</sub>e threshold in a separate Subsection 2-2-304.2 will make this subsection easily severable for purposes of EPA review and approval. The Air District will be able to submit only Subsection 2-2-304.1 for EPA review and approval, and will not have to submit Subsection 2-2-304.2 to EPA so as not to implicate the concerns about *Utility Air Regulatory Group v. EPA*. For all of these reasons, the Air District is proposing the bifurcated approach, which is shown in underline/strikeout format in a redline markup of the current Section 2-2-304 in the draft revisions to Regulation 2, Rule 2, being published in conjunction with this Workshop Report.

### **C. 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 approved the 2012 Amendments effective August 31, 2016, but the approval was subject to a “limited disapproval” requiring the District to correct certain “deficiencies” identified by EPA.<sup>8</sup> The revisions the Air District is considering at this time would address these identified deficiencies, as outlined below.

These revisions are primarily minor and technical in nature, and they implement 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 amendments currently under consideration 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 Air District is proposing to 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. In response, the Air District is considering simply removing the language that EPA finds objectionable altogether, as it is redundant and/or does not serve any regulatory purpose anymore.

---

<sup>8</sup> See *supra* fn. 2.

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 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. This proposed revision is shown in redline underline/strikeout format in the draft revisions to Section 2-1-239 being published in conjunction with this Workshop Report. (District staff have also taken this opportunity to make some additional grammatical clarifications to the definition, as shown in the redline version.)

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 Air District is therefore considering a proposed revision to Section 2-1-424 to do so, as shown in redline underline/strikeout format in the draft revised Section 2-1-424 being published in conjunction with this Workshop Report. (And as with Section 2-1-239, the District has also

taken the opportunity to make some additional grammatical clarifications, as shown in the redline version.)

Finally, EPA Region IX staff have also requested that the Air District address a 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 District is considering addressing 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 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 District would limit the scope of the exemption for agricultural sources so that it would not exempt large animal-feeding operations from Air District permitting requirements. But it would do so in a way that does not use the language that EPA Region IX staff asked the Air District to remove. This proposed revision is also shown in underline/~~strikeout~~ format in the draft revisions to Section 2-1-239.

## 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 Air District is proposing 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 shown in redline underline/~~strikeout~~ format in the draft revisions to Section 2-1-234 being published in conjunction with this Workshop Report. These revisions would be a non-substantive technical amendment only. 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 has 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 Air District is proposing revisions to 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.<sup>9</sup> The changes are shown in redline underline/strikeout format in the draft revisions to Section 2-2-224 being published in conjunction with this Workshop Report.

#### 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 evaluate 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 Air District is therefore proposing 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. This revision is shown in redline underline/strikeout

---

<sup>9</sup> 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.

format in the draft revisions to Section 2-2-305.3 being published in conjunction with this Workshop Report.

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

Fugitive emissions are included for nearly all purposes in NSR permitting.<sup>10</sup> 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. This issue is implicated in the Air District’s NSR regulations 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 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 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 Air District is proposing to 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 District is also proposing 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. These revisions are shown in redline underline/~~strikeout~~ format in the draft revisions to the relevant sections being published in conjunction with this Workshop Report.

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 intend to publish this list on the District’s website

---

<sup>10</sup> 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.)

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 Air District is considering addressing this limited disapproval item by referencing the FLAG guidance as suggested by EPA. Specifically, this revision would state 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 would then state that if a project is subject to the Class I area analysis requirement in Section 2-2-401.4, then 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. To address this request, Air District staff have included corresponding revisions in the draft amendments being published in conjunction with this Workshop Report.

## 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, it 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, then 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. The District is therefore proposing to establish a time limit of 2 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 2 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.

This proposed revision is shown in redline underline/strikeout format in the draft revisions to Section 2-2-411 being published in conjunction with this Workshop Report. (Note also that the revision removes 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 Equivalency Demonstration*

Emission reduction credits are required to be “surplus,” which means that in order to be creditable a reduction must be over and above what is legally required anyway. This means that 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.<sup>11</sup>

The Air District’s credit-generation rules require emission reduction credits to be surplus-adjusted at the time the credit is taken. 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. The Air District addresses this concern through the mechanism set up under Section 2-2-412, entitled “Demonstration of NOx and POC Offset Program Equivalence.” This provision requires the District to make a demonstration each year that the total amount of offsets the District has obtained through its NOx and POC offsets requirements (without conducting an additional surplus adjustment at the time of credit use) exceeds the total amount of offsets that EPA Region IX would require for major facilities and major modifications under its interpretation (with the additional surplus adjustment at the time of credit use).

The Air District has never had difficulty making this demonstration, because the District imposes its offsets requirements at a much lower threshold than the federal major facility/major modification thresholds. This means that the Air District obtains more offsets than EPA Region IX would require, even without applying a surplus adjustment at the time of credit use, because it is obtaining offsets in many situations where EPA’s program does not even apply.

EPA Region IX expressed a concern, however, that Section 2-2-412 does not provide any remedy in the event that the Air District is unable to make the required demonstration. EPA stated that in order to provide a remedy, the District should specify that in the event that it does not make the required demonstration, then any offsets

---

<sup>11</sup> 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.

provided for permits for federal major sources and major modifications must be adjusted at the time they are used under EPA Region IX's approach, until such time as the District has made up any shortfall.

The Air District is proposing additional language to Section 2-2-412 to make this change, as shown in redline underline/~~strikeout~~ format in the accompanying draft revisions to Reg. 2-2. The revisions would state that if there is a shortfall situation, then the APCO will apply a surplus adjustment at the time any offsets are used, until such time as the shortfall is remedied. As EPA's concerns apply only to federal major facilities and major modifications subject to the federal Major Non-Attainment NSR requirements, this requirement will apply only for a new "major stationary source" as defined in 40 C.F.R. section 51.165(a)(1)(iv) or a "major modification" as defined in 40 C.F.R. section 51.165(a)(1)(v).

In addition, the proposed revisions add PM<sub>2.5</sub> as a pollutant subject to the equivalency demonstration requirement (in addition to NO<sub>x</sub> and POC, which are the pollutants currently subject to this provision), as PM<sub>2.5</sub> is also a federal non-attainment pollutant.

The proposed revisions 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 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. 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 District is therefore proposing to remove the provision allowing fully offset sources to use their permitted emissions to establish the baseline for the emission reduction credit calculation. The District is considering revised regulatory language that would 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 revision would also reorganize the remaining regulatory language somewhat. In addition, a related revision would remove Section 2-2-213, the definition of “fully offset source,” which will be redundant if the special baseline provision for fully offset sources is removed. The proposed revisions are shown in redline underline/~~strikeout~~ format in the draft revisions to Regulation 2, Rule 2, being published in conjunction with this Workshop Report.

**D. Refinements to NSR Regulations to Address Concerns Raised 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. (Greenhouse gases are regulated under the under District’s PSD BACT requirement in Section 2-2-304, as discussed

above.) Subjecting GHGs to regulation implicates 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 Air District is considering a revision to 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 Air District is considering a revision to Section 2-1-413.1 to make clear that the 10 tpy limit applies only to regulated pollutants other than GHGs.

These revisions are shown in redline underline/strikeout format in the draft revisions to Regulation 2, Rule 1, being published in conjunction with this Workshop Report.

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

In the 2012 Amendments, the Air District address 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, Air District staff are considering 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 would lose its eligibility for the multi-source permit and would have to be permitted from scratch as a new source.

This revision is shown in redline underline/~~strikeout~~ format in the draft revisions to Section 2-1-413 being published in conjunction with this Workshop Report.

### 3. *Calculation of Emissions Increases That Trigger the “Best Available Control Technology” Requirement in Section 2-2-301*

The Best Available Control Technology requirement in Section 2-2-301 is intended to apply to modifications of existing sources that result in an emissions increase.<sup>12</sup> Prior to 2012, however, the language of Section 2-2-301 was silent on how to determine whether a modification results in an emissions increase. The 2012 Amendments attempted to address this situation by specifying that the emissions increase determination should be made using the “actual-to-potential” methodology set forth in Section 2-2-604. The language adopted in the 2012 Amendments therefore specifies that whether there is an emission increase from a modification is determined by comparing

---

<sup>12</sup> The BACT requirement applies only to sources with a potential to emit of 10 pounds per day or more. The discussion set forth here assumes that the source exceeds this threshold. Per the language of Section 2-2-301, modifications are subject to BACT (i) if the source has a potential to emit 10 pounds per day or more, and (ii) the modification will increase emissions.

the actual emissions from the source before the modification to the source's maximum potential emissions after the modification.

Staff have since come to realize that it would be more appropriate to apply the requirement BACT based on increases in potential to emit, however. That is, it would be more appropriate to determine whether there is an emission increase from a modification by comparing the source's potential to emit before the modification (either daily or annual) with its potential to emit after the modification. If there is any increase in either the daily or annual potential to emit of a given District BACT pollutant, then the application would be required to apply BACT for that pollutant.

Using this potential-to-potential methodology would be more appropriate than using the actual-to-potential methodology specified under Section 2-2-604 because it would encompass modifications that increase short-term emissions but do not result in any annual emissions increases under the Section 2-2-604 methodology. For example, if a facility seeks to increase its daily emissions limit, it could simply reduce the number of days it operates per year in order to ensure that its annual emissions do not increase. If the facility takes an annual emissions limit that is equal to its historical annual emissions, then (by definition) its future annual potential-to-emit will not exceed its historical actual annual emissions, and there would be no increase as measured under Section 2-2-604. Capping the source's annual emissions would therefore allow the source to have a significant increase in its daily emissions limit, but not trigger BACT because its annual emissions will not increase under Section 2-2-604. Measuring increases based on daily and annual potential to emit will alleviate this concern and ensure that BACT applies to short-term increase as well, regardless of whether the facility takes a limit on its annual emissions. In addition, this approach is how the Air District historically applied the BACT thresholds before the 2012 Amendments were adopted.

For these reasons, the Air District is considering revisions to Section 2-2-301 to state that a new or modified source must apply BACT for each District BACT pollutant for which (i) the source has a potential to emit of 10 pounds or more per day; and (ii) there will be an increase in the source's daily or annual potential to emit as a result of the new source or modification. For new sources, this would mean that any new source with a potential to emit of 10 pounds per day or more of a given pollutant will require BACT for that pollutant, as any new source by definition results in an increase in potential to emit. For modified sources, it would mean that (i) the source must have a potential to emit of 10 pounds per day or more of a given pollutant (after the modification is implemented), and (ii) the modification must result in an increase in the daily or annual potential to emit of that pollutant, in order for BACT to apply. As always, the requirement will be pollutant-specific, meaning that BACT applies only to the individual pollutants for which the source satisfies these criteria. These revisions are shown in redline underline/~~strikeout~~ format in

the draft revisions to Section 2-2-301 being published in conjunction with this Workshop Report.

#### 4. 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 Air District is proposing additional language in Section 2-1-213 to clarify how the definition applies in this situation, as shown in redline underline/~~strikeout~~ format in the draft revisions. The proposed revision also includes language to prevent circumvention of the 12-month time limit by using multiple, successive temporary sources to perform the same function at the refinery.

#### **E. Revisions to NSR and Title V Regulations 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 gases 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 all by themselves, 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 properly interpreted.

As a result, the Air District is now considering removing the 2012 revisions that added greenhouse gases to the Title V program. That is, the Air District is considering removing 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 would revert back to how they were before the 2012 revisions. These changes would make the Air District's Title V program consistent with how the Supreme Court interpreted the Title V requirements in the *UARG* case.<sup>13</sup> These

---

<sup>13</sup> Note that *UARG*, and the revisions the Air District is contemplating, 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

changes are shown in redline underline/~~strikeout~~ format in the draft revisions to Regulation 2, Rule 6 being published in conjunction with this Workshop Report.

#### **IV. EMISSION REDUCTION AND COMPLIANCE COST IMPACTS**

This section discusses the impacts that the proposed changes would have on reducing emissions in the Bay Area, as well as cost impacts on regulated entities and other relevant considerations regarding implementation of the changes.

##### **A. Review of Significant Crude Slate Changes**

Regarding the proposed revisions to require a review of all crude slate changes to ensure that they are complying with applicable NSR requirements, these revisions are primarily aimed at improving compliance with and enforcement of the Air District's NSR program. As enhancements to the enforcement of the existing NSR program, rather than additional substantive requirements, it is difficult to quantify the extent of any additional emission reductions or compliance costs associated with such revisions.

In situations where a refinery making a crude slate change would have complied with all NSR permitting requirements anyway, the proposed amendments would have essentially no impact. In those situations, the proposed revisions would not require the refinery to do anything differently, because the refinery is already complying.

The situations where the proposed revisions would have an impact would be any situation where a crude slate change would require an NSR permit, but the refinery makes the change without applying for or obtaining the required permit. The proposed revisions would have a significant impact in such cases because they would require the refinery to notify the Air District, which would bring the change to the District's attention and allow the District to enforce its NSR regulations by requiring the refinery to implement the applicable NSR requirements. These requirements include using the Best Available Control Technology to limit emissions as much as possible; offsetting any new emissions increases with corresponding emission reductions from other sources so that there is no net increase in emissions overall; conducting an air quality impact analysis to ensure that the source will not cause or contribute to an exceedance of applicable air quality standards; and other substantive and procedural requirements.

If refineries are making crude slate changes subject to NSR without complying with the regulations, then better enforcement to require the refineries to implement these requirements will have substantial emission reduction benefits. It is difficult to predict the

---

those applicable requirements address greenhouse gases. This principle of Title V permitting was not affected by the *UARG* decision.

extent of such benefits, however, as the scope of any undetected regulatory violations is (by definition) unknown.

Similarly, if refineries are avoiding the costs of implementing the NSR requirements when they make modifications associated with crude slate changes, then the proposed revisions will impose additional compliance costs on those refineries by forcing them to comply. But the extent of any such additional compliance costs is unknown, given that the scope of any such non-compliance is unknown. Furthermore, such costs would not be new costs imposed by additional regulations, they would simply be existing compliance costs that refineries may have been illegally avoiding if they have been failing to comply with existing regulations.

Finally, the proposed revisions will most likely require some increased resources from Air District staff. The revisions will require refineries to submit additional permit applications associated with crude slate changes, and Air District permitting staff will need to review such applications to ensure that they are compliant with applicable NSR requirements. There are five refineries in the Bay Area, and although they are starting to move to different sources of crude oil supply, it is not expected that they will be making significant crude slate changes on a frequent basis. Air District staff therefore anticipate that the additional resource burdens involved will be manageable at current staffing levels.

#### **B. More Stringent “Best Available Control Technology” Requirements For Greenhouse Gas Permitting**

For the proposed reduction in the GHG BACT threshold from 75,000 tpy CO<sub>2e</sub> to 25,000 tpy CO<sub>2e</sub>, the emission reductions and cost impacts will result from additional sources being required to implement BACT under the lower threshold. As discussed above, Air District staff’s analysis shows that approximately 17 additional sources per year are estimated to become subject to the BACT requirement for their GHG emissions as a result of the proposed change (in addition to the sources that will already be subject to the BACT requirement under the existing 75,000 tpy CO<sub>2e</sub> threshold).

It is difficult to predict with certainty what the impacts will be for these sources, as the BACT requirement does not prescribe any specific emissions performance level. Since BACT must be determined for each individual source on a case-by-case basis, it is hard to say what exactly these additional sources will be required to do to comply and what emission reductions and cost impacts would result. Generally speaking, however, Air District staff expect that overall GHG emission reductions from a new lower threshold will be modest at first, but will become significant over time as new and more effective GHG emissions control technologies become available.

Emission reductions will likely be modest at first because add-on control technologies are currently available only for a limited number of GHG emissions sources. Most projects to date that have evaluated add-on control equipment as a potential BACT technology under the existing 75,000 tpy CO<sub>2e</sub> threshold have found that it would not be feasible or cost-effective. CCS, for example, the technology referred to above that injects GHGs into underground storage reservoirs, is hampered by constraints such as the difficulty of finding suitable reservoirs and the current high costs associated with building and operating a capture and injection system. Where add-on control technologies like this are not feasible, BACT will in most cases be implemented through the use of the most efficient technology available – i.e., the technology that allows the source to function as needed for the facility's operations with the least amount of GHG emissions. Using the most efficient technology has definite emission benefits, of course, not only for GHGs but also for other pollutants. But facilities already have incentives for using efficient technologies, which may temper the substantive impact of this regulatory requirement as compared to the status quo. For example, facilities have an economic incentive to use the most efficient equipment in order to save on fuel costs. If such facilities are already using such efficient equipment to save on fuel, making it a regulatory requirement in order to limit GHG emissions may make less of a substantive difference in terms of actual changes in the way facilities operate. For these reasons, lowering the BACT threshold will most likely have limited impacts in the near term.

Lowering the threshold has a much greater chance to achieve substantive GHG emission reductions in coming years, however, as innovative control technologies mature. The BACT requirement is designed to be technology-forcing, as discussed above, and so as new technologies become more widely available they will be required as BACT for GHG sources. At that point, having a lower GHG threshold (i.e., requiring such technology on a greater number of sources) has the potential to reduce GHG emissions by millions of tons per year of CO<sub>2e</sub>. Such reductions will make a substantial contribution to the Air District's climate protection efforts in the Bay Area. It is not possible to develop a precise estimate of the magnitude of such reductions at this point, however.

Regarding cost impacts, it is similarly difficult to predict what compliance costs will be imposed as a result of lowering the BACT threshold. Additional costs for regulated facilities will most likely be fairly limited in the near term for the same reasons that GHG emission reduction impacts will most likely be limited. In the near term, until new technologies become more widely available, BACT will primarily be implemented through the use of efficient equipment. Investing in such equipment saves money in the long run through reduced fuel costs, and so any additional costs involved in purchasing higher-efficiency equipment will be offset (at least to some extent) through fuel savings over time. Lowering the BACT threshold in such situations is therefore unlikely to have significant additional compliance cost impacts.

In the longer term, however, lowering the BACT threshold for GHGs may well involve substantial compliance costs as new technologies become more widely used. For instance, implementing CCS involves significant capital infrastructure, as well as additional operational costs such as the energy costs of capturing and compressing the GHG emissions for injection into the underground storage reservoir. It is difficult to estimate what the costs will be at this point, however, because CCS will not become feasible for most facilities until the costs come down significantly. Accordingly, cost estimates for what it would cost to implement CCS today do not provide much of a useful basis for estimating what it may cost in the future at a point when CCS has become widely available. It is worth noting, however, that the BACT requirement has a built-in cost-effectiveness test, as specified in CAA Section 169's mandate to take into consideration "economic impacts and other costs." (See CAA § 169(3), 42 U.S.C. § 7479(3).) Any implementation of CCS or other technologies will therefore be required as BACT only to the extent that doing so is cost-effective, in terms of the amount of GHG reductions that can be achieved per dollar spent on emissions controls.

Finally, there will also be impacts to Air District permitting staff resources in the form of additional work to implement the BACT requirement in permit applications for projects that are subject to the requirement. This work includes researching what GHG control technologies may be available for a source, evaluating which of those technologies would be feasible to implement given the specific circumstances of the source under review, implementing the selected control technology through permit condition language (e.g., turning a control technology selection into a performance standard or emissions limit by which compliance can be measured), and developing associated compliance monitoring and recordkeeping requirements. Lowering the threshold at which this analysis is required from 75,000 tpy CO<sub>2e</sub> to 25,000 tpy CO<sub>2e</sub> will impose additional resource burdens on staff in the Air District's Engineering Division and Legal Division (as well as some potential ancillary burdens on other divisions) to ensure that these evaluations are conducted and documented in a thorough and comprehensive manner. Air District staff believe that the additional resource burdens can be accommodated at the 25,000 tpy CO<sub>2e</sub> threshold level with existing staff, however, and that no additional staff will need to be hired.

### **C. Revisions to Address "Deficiency Items" Identified by EPA**

The revisions the Air District is considering to address the deficiency items identified by EPA are mostly minor and administrative in nature. As such, they are not expected to have any significant impact on emissions or on compliance costs. That is, the Air District's NSR permitting program already imposes stringent permitting requirements for new and modified sources, and these requirements would not change in any significant way. As such, the emission reduction benefits that the District achieves

from its NSR program, and the associated costs for complying with the NSR program, would not significantly change.

**D. Refinements to Address District Staff Concerns From Recent Experience in Implementing the 2012 Amendments**

The other revisions the Air District is considering to improve the functioning of the NSR program are similarly minor and administrative in nature and not expected to have any significant impacts on emissions or compliance costs. The Air District is not seeking to make any fundamental changes in the way any NSR requirements work. The revisions being contemplated are simply minor refinements to the existing requirements to ensure that they reflect the Air District's intent on how the NSR program should be implemented.

**E. Revisions to Regulation 2, Rule 6, to Address the *UARG v. EPA* Decision**

The only substantive revision the Air District needs to make to address the *UARG v. EPA* decision is to revise Regulation 2, Rule 6 to provide that a facility does not become subject to the Title V Major Facility Review operating permit requirements solely because of GHG emissions. The revision affects a very limited number of facilities that exceed the now-vacated 100,000 tpy CO<sub>2e</sub> Title V threshold for GHGs, but do not exceed the Title V threshold for any other pollutants. These facilities will no longer be subject to Title V permit requirements.

Not only will this revision affect a very limited number of facilities, there will be no change in emissions from the facilities that are affected because they will still be subject to all of the same emissions limits and other permit requirements. As noted above, Title V is not a program that imposes any new permit limits or other substantive requirements, it is simply an administrative tool that gathers all existing permit limits and substantive requirements from other sources into one permitting document to improve transparency and enforceability. As such, any facilities affected by this revision will still have to comply with all of their permit limits. The only change is that they will not have to go through the Title V process and have those permit limits reflected in a Title V permit document.

For similar reasons, there will be little economic impact on any affected facilities because they will still face the exact same costs of compliance with respect to their substantive emissions requirements, which will remain unchanged. These facilities could see some limited economic benefit from not having to go through the administrative process of getting a Title V permit, but ultimately that benefit is not expected to be significant compared to their overall compliance costs resulting from their existing substantive air pollution control requirements.

## **V. REGULATORY ANALYSIS REQUIREMENTS**

This section addresses certain analyses and evaluations that the Air District is required to undertake when adopting regulations, including requirements under the District's enabling statutes in the California Health & Safety Code and requirements under the California Environmental Quality Act (CEQA).

### **A. California Health & Safety Code**

Air District staff believe that the revisions to the Air District's NSR program that staff are considering will comfortably satisfy the requirements in Health & Safety Code Section 40727 of necessity, authority, clarity, consistency, non-duplication, and reference. Staff believe the revisions are necessary for the reasons discussed in this Workshop Report. The Air District has the legal authority to adopt these revisions under Health & Safety Code Sections 40001, 40702, and 40910 *et seq.* (among other authority). The draft language set forth in draft revisions to Regulation 2, Rules 1, 2 and 6 being published in conjunction with this Workshop Report that implements these revisions is written so as to be clear and easily understood by affected persons. These revisions are consistent with existing laws, regulations and other legal requirements, and they do not duplicate any existing requirement in current state or federal regulations. Finally, the provisions of law that would be implemented by these revisions are identified and referenced above in connection with the statement of the Air District's legal authority for the revisions.

In addition, Air District staff will conduct a socioeconomic impact analysis in order to evaluate any potential socioeconomic impacts as required by Health & Safety Code Section 40728. Air District staff will consider the results of that analysis in making any final recommendation or proposal on adopting the amendments currently under consideration. The results of the socioeconomic impact analysis will be made available for public review and comment prior to any hearing on adopting any proposed amendments.

### **B. California Environmental Quality Act**

Adoption of regulatory amendments will also be subject to the California Environmental Quality Act (CEQA), Cal. Pub. Res. Code § 21000 *et seq.* Air District staff will conduct a CEQA analysis of the potential for any significant adverse environmental impacts from any proposed amendments to Regulation 2 in accordance with CEQA and its implementing Guidelines. The Air District will make the resulting analysis and documentation available for public review and comment prior to any hearing on adopting of any proposed amendments.

## **VI. PUBLIC PARTICIPATION AND COMMENT OPPORTUNITIES**

The Air District encourages interested members of the public to provide input into the District's consideration of the proposed regulatory changes described in this Workshop Report. This Section outlines the upcoming steps in the rule development process and provides further information about how members of the public can get involved.

### **A. Next Steps in the Rule Development Process**

The Air District is currently at the beginning of the process for adopting regulatory revisions. Air District staff have identified the need for revisions as outlined in this document, and they have developed regulatory language for amendments to the existing regulations in order to show interested members of the public the specific changes under consideration. This draft language is being provided for public review in the redline ~~underline/strikeout~~ workshop drafts of Regulations 2-1, 2-2, and 2-6 that the District is publishing in conjunction with this Workshop Report.

The next step will be to hold public workshops to discuss the draft revisions with interested members of the public and to receive comment and feedback from the public. Air District will be holding a number of public workshops, as outlined in more detail below, and staff will take comments from the public both orally at the workshops and in writing up until June 26, 2017.

Air District staff will then review and consider all comments received by June 26, 2017, to determine the most appropriate next steps. District staff expect to make revisions to the workshop drafts that are being published at this point based on the comments received. District staff then expect to propose a final set of regulatory amendments for consideration and adoption by the Air District's Board of Directors.

The Board of Directors will consider and decide on any proposed amendments at a public meeting. Air District staff will publish the proposed amendments in advance of the public meeting and will provide a further opportunity to submit written comments at that point. Members of the public will also be invited to comment in person at the hearing.

District staff will also complete the CEQA analysis process and other regulatory reviews required under the Health and Safety Code, as outlined in Section V above, in advance of any consideration of regulatory revisions by the Board of Directors. The CEQA document and other required documentation will also be made available for public review and comment in advance of the public meeting by the Board of Directors to consider any regulatory revisions, and members of the public will have an opportunity to comment at the public meeting on these issues as well.

Once the Board of Directors has adopted any regulatory amendments, the Air District will then submit the revised regulations to the Air Resources Board. After reviewing them, the Air Resources Board will then forward them on to EPA Region IX for review and approval. Upon approval by EPA, the revised regulations will become part of California's State Implementation Plan under the federal Clean Air Act, at which point they will become enforceable in federal court by EPA and by members of the public in citizen suits.

## **B. Opportunities For The Public To Get Involved**

The Air District will be providing a number of opportunities for the public to get involved in the development of these regulatory amendments. As noted above, Air District staff will be holding several public workshops at various locations in the Bay Area in June of 2017 to discuss the regulatory revisions District staff are considering. The Air District invites all interested members of the public to attend these workshops. The workshops will provide an opportunity for members of the public to learn more about the regulatory revisions being considered. The workshops will also provide a chance for members of the public to ask questions of District staff about the revisions, and to provide oral comments on any aspect of the revisions.

Air District staff are planning to schedule these public workshops around the week of June 12, 2017. Specific details on the dates, times and locations will be available on the Air District's website at [www.baaqmd.gov](http://www.baaqmd.gov). The Air District is also planning to provide webcast access so that members of the public can attend remotely (via an electronic device) if they are not able to attend in person. The District will also archive the webcast on its website for later viewing by anyone who cannot attend the live webcast.

After the public workshops are completed, the Air District will also provide a further time period for members of the public to submit written comments. The District will accept comments up until **June 26, 2017**. Comments can be submitted via email or in hard copy to Greg Stone, Supervising Air Quality Engineer, at the following address:

Greg Stone  
Bay Area Air Quality Management District  
375 Beale Street, Suite 600  
San Francisco, CA 94105  
Email: [gstone@baaqmd.gov](mailto:gstone@baaqmd.gov).  
Tel: (415) 749-4745

Mr. Stone will also be able to answer questions and provide additional information regarding this rule development project.