

September 25, 2017

Greg Stone, Supervising Air Quality Engineer Bay Area Air Quality Management District 375 Beale St., Suite 600 San Francisco, CA 94105

Dear Mr. Stone,

350 Bay Area represents over 22,000 Bay Area residents and constituents of the Bay Area Air Quality Management District (BAAQMD, Air District) who are fighting for a stable climate future and demanding that our government take meaningful policy action to address the climate crisis at a scale commensurate with the problem. To that end, we would like to offer the following comments on your "Staff Report for Proposed Technical and Administrative Amendments to New Source Review and Title V Permit Programs" (Staff Report).

Background

The vast majority of Bay Area residents, the vast majority of Air District staff, and a majority (if not all) of the Directors on the Air District's Board—which is to say, practically everyone in the region—have both an intellectual and a visceral understanding on some level of the threat that human-caused global warming poses to all living beings on this planet and to the very physical systems that support life as we know it.

Virtually all of us also understand that we as a human society are failing miserably to change our behavior enough to slow and halt, much less reverse, this climatic crisis. We know, for example, that the average temperature on Earth has already risen over 1°C since pre-industrial times, more than halfway to the internationally agreed tipping point into catastrophe. We also know that warming to date is already being found responsible for instigating or exacerbating some of the extreme weather phenomena that we have seen over the past few years, including the recent rash of Caribbean hurricanes, out of which that region is just beginning to dig and from which the prospect of full recovery is unclear. Finally, we know very well that if we as a society fail to act in accordance with our intellectual, economic, and political capacity, we will be leaving the world in far, far worse condition than we inherited it. Our descendants will pay a terrible price in the future for our inaction today, perhaps even eventually the price of extinction.

With this as a backdrop, it is reasonable to expect that every person who has any relevant authority whatsoever—be it the moral and experiential authority of a member of the public, the authority of knowledge held by educated and experienced BAAQMD staff, or the statutory authority of the BAAQMD Board of Directors—do what they can to bring that authority to bear for the purpose of curbing, then reducing, greenhouse gas (GHG) emissions through all policy avenues at hand. To shirk such action, or to make excuses for inaction, is to fail our roles in our participatory democracy and our prospective responsibility to future generations.

<u>Overview</u>

1. BAAQMD abandons 2017 Clean Air Plan commitments

Permitting is the central function of the Air District, and the agency's permitting actions set the limits of, and circumscribe the possibilities for, emissions control and protection of public health in the region. The US

Environmental Protection Agency's (EPA) "limited disapproval" in 2016 of BAAQMD's 2012 round of changes to its permitting regulations required that some minor technical amendments be made, which provided the Air District with a critical opportunity to take a fresh look at its permit program; whether it accurately and adequately reflects the agency's stated commitments, plans, and policy visions; and in what ways it might be concurrently improved to eliminate any gaps in such achievement that may persist. Indeed, the Air District's much-heralded 2017 Clean Air Plan had already queued up a couple such commitments for the agency, represented as Control Measures SS9 and SS17.

Yet, in the end, the Air District is reneging on these key Clean Air Plan commitments, choosing only to make rule changes that are "relatively minor, and are mostly technical and administrative in nature," only addressing GHGs in the rule amendments by adding more exemptions for them, and wholly squandering this opportunity to ensure that the agency's permitting actually results in compliance with its own policies, commitments, and promises to the public. This collective course of action would seem to indicate that the status quo vis-à-vis permitting is working just fine. Yet the Air District's own data of current and forecasted GHG emissions in the region, overlaid with regional and state emission targets (reproduced below), illustrate extraordinarily clearly that this is not the case!

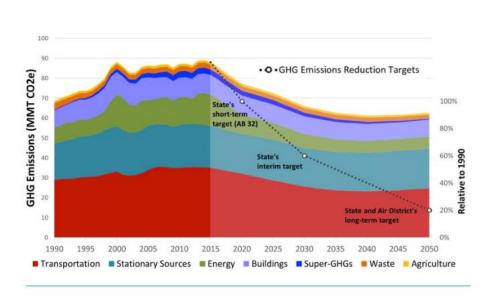


Figure 3-9. Projected Bay Area GHG Emissions by Sector Based on State Policies (100-year GWP)

No, the data clearly show that the status quo is not working just fine; rather, it is rendering our region and planet increasingly uninhabitable. It is, correspondingly, indefensible for the Air District to cancel or postpone action on these control measures.

The 2017 Clean Air Plan clearly states that even the *full implementation* of all its control measures would only achieve a fraction of the emission reductions necessary for our region to do our part to meet regional and state climate targets. Yet the Air District is already backing off on SS9 after industry pushback, saying that it needs more study. And the Air District is already backing off on SS17, SS11, and untold other control measures as yet unknown to the public, because of a misguided abdication of responsibility and authority (further expanded below).

How does BAAQMD plan on making up this collective shortfall in emission reduction? Was the Regional Climate Protection Strategy that the Board of Directors called for in 2013 just a paper exercise? The public, independently and through repeated votes of the Board of Directors, is counting on more than that.

2. BAAQMD flatly misuses AB 398 to justify inaction

Air District staff had the right idea on rulemaking, initially suggesting amendments to the permit regulation to implement the Clean Air Plan's published promises to the region. 350 Bay Area found the proposed amendments demonstrably weaker than necessary to meet Air District commitments and submitted comments to that effect. Between that time and the issuance of the final proposed amendments, however, a momentous yet secretive piece of state legislation was passed in a most undemocratic and controversial fashion. To be sure, the legislation—AB 398—is an offensive and serious infringement on the Air District's regulatory authority, and one that we believe must be rectified in a future legislative session.

That serious infringement notwithstanding, the Air District is erroneously, fallaciously, and liberally misrepresenting the plain language and the import of this legislation as a near-universal justification to abdicate critically significant pieces of its regulatory responsibility and authority with respect to GHGs.

Air District Counsel has guided staff to assert on page 2 of the Staff Report that: "recent legislation has restricted the Air District's legal authority to impose regulatory limits on CO₂ from sources subject to the state's Cap and Trade program."

This is the relevant preemption language in AB 398, Sec. 12 that applies to Air Districts (emphasis added):

Section 38594 of the Health and Safety Code is amended to read:

- (a) Except as provided in subdivision (b), nothing in this division shall limit or expand the existing authority of any district.
- (b) A district shall not adopt or implement an emission reduction rule for carbon dioxide from stationary sources that are also subject to a market-based compliance mechanism adopted by the state board pursuant to subdivision (c) of Section 38562.
- (c) Nothing in this section affects in any manner the authority of a district to adopt or implement, as applicable, any of the following:
- (1) A rule, regulation, standard, or requirement authorized or required for a district to adopt under Division 26 (commencing with Section 39000) for purposes other than to reduce carbon dioxide from sources subject to a market-based compliance mechanism adopted by the state board pursuant to subdivision (c) of Section 38562.

New Source Review Rule 2-2 is decidedly *not* an emission reduction rule. The purpose of pre-construction review and the issuance of operating permits, whether under federal New Source Review (NSR), federal Prevention of Significant Deterioration (PSD), or non-federal NSR programs is to curb increases in emissions from new and modified sources by imposing Best Available Control Technology (BACT) so as to *restrict emission increases* from those sources, not to achieve "emission reductions" as such. The normal result of NSR and PSD permitting is to place a cap on previously nonexistent emissions (i.e., emissions from *new* sources, and *new* emissions from modified sources) through enforceable permit conditions.

On its face, the plain language of Health and Safety Code (H&SC) §38594 clearly establishes its purpose as restricting Air District authority to *reduce* CO₂ emissions from sources subject to California's Cap and Trade program. There is no explicit prohibition in this new legislative language on an air district's authority to limit emissions from *new* sources, and *new* emissions from modified sources. **Indeed, in clear distinction with the**

language and the purpose of H&SC §38594, the goal and the purpose of NSR permitting is to allow the operation of a new or modified source that will emit pollution that wasn't emitted before, not to impose restrictions on—or require emission reductions from—already-existing sources that are, or will predictably become, subject to a market-based compliance mechanism intended to limit the emission of carbon dioxide from existing stationary sources.

If the foregoing is true, or likely true, or even possibly true, then the public deserves better from this agency. BAAQMD is tasked with protecting the public's health from unnecessary air pollution, and it cannot shirk its public duty to control the emission of greenhouse gases from new sources—which are not subject to the legislature's recent restriction on air district action to control carbon dioxide emissions from certain categories of existing sources.

Rather, BAAQMD should fully incorporate the review of proposed increases in GHG emissions from proposed new or modified sources into its permit program. If, by taking such an action, BAAQMD is put in the position of testing the meaning and applicability of H&SC §38594, so be it. The public will never know what the preemption language of this statute really means unless the Air District asserts its proper authority. If a legal challenge on this one narrow point is brought, the courts have broad authority to review and make a final decision on the extent of the applicability of the new statutory language.

In this regard, the Board of Directors should note that the language of H&SC §38594 actually **allows** the Air District to include carbon dioxide in its NSR rule. Again, AB 398 clearly states that:

- (c) Nothing in this section affects in any manner the authority of a district to adopt or implement, as applicable, any of the following:
- (1) A rule, regulation, standard or requirement . . . for purposes other than to reduce carbon dioxide from sources subject to a market-based compliance mechanism adopted by the state board pursuant to subdivision (c) of Section 38562.

Because the District's NSR rule is *not* an "emission reduction" rule, but is, rather, a rule to prevent emission increases from new stationary sources, there can be no basis for Air District staff to convincingly argue that the District's NSR rule is somehow preempted from addressing *increases* in carbon dioxide emissions from new or modified sources.

If the Air District's authority in this area and others is not tested, but is instead ceded without either due diligence or the necessary courage that a regulatory agency can and should manifest in protecting the interests of its constituents, then BAAQMD will have failed its constituents and will have effectively repudiated its own previously declared mission and multiply-stated commitments to take necessary action to protect the global climate. Given the incredible gap between our GHG emissions and where they need to be, the immeasurable negative consequences that will arise if that gap is not addressed, and the clear distinction between the kind of "emission reduction rule" from existing sources that is prohibited by AB 398 and the role the Air District's permit program plays in limiting emissions increases from new and modified sources, it is indefensible for the Air District to take a pass on this key issue. Failing to apply eminently sensible and feasible NSR requirements to new emissions of carbon dioxide from new or modified stationary sources will serve as the worst kind of irresponsible cowardice that a regulatory agency could demonstrate.

The remaining comments are directed at the specific sections of the Staff Report noted in the headings below.

II. Regulatory Background

A. The Federal and State Regulatory Context

1. New Source Review

Considering the fact that the Air District is using the passage of AB 398 to abandon its commitment to regulate GHGs via the NSR program, this section should include a plain language overview of the <u>purposes</u> of state and federal NSR. We assert that the fundamental purpose of all pre-construction review programs is to curb emission increases from new and modified sources. Emission reduction rules, on the other hand, are those commonly referred to as Best Available Retrofit Technology (BARCT) rules. It is important to clarify the distinct difference of purpose between permit rules and BARCT rules. Both the public at large and the Board of Directors, which is responsible for adopting the Air District's regulatory programs, deserve to have this important distinction made explicit.

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

2. Substantive NSR Requirements

We believe the Air District has, in effect, made a reasonable case that GHGs should be regulated as non-attainment pollutants. The Air District has discretion to do so. It also has the moral and scientific basis to take such action. See related comments in section D, below.

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

A careful and more thorough discussion of the development of the District's NSR program will reveal that in the late 1970's, the District's NSR program was essentially intended to assure nothing more than that a new source of air contaminants would not result in a violation of an applicable ambient air quality standard at ground level. In other words, the Air District's original NSR program was predicated on the notion that "dilution is the solution to pollution." A proposed new source (even a very large one) would be acceptable and could be permitted if simply employing a tall stack abetted by enough air flow to push the new emissions sufficiently high in the atmosphere that an air quality model would not show those emissions resulting in either a measurable increase in ground-level concentrations of a non-attainment pollutant or a violation of an air quality standard for an attainment pollutant. When faced with this sham of a rule, the California Air Resources Board (ARB) challenged the Air District's rule and ultimately persuaded the agency to adopt a version of the Model NSR Rule that ARB had initially developed for (and ultimately imposed on) the South Coast Air Quality Management District.

That ARB Model NSR Rule incorporated the notions that any emission increase above a certain threshold (then, 150 pounds per day) would be required to install BACT and that any emission increase above a higher threshold (originally, 250 pounds per day) would have to be offset by emission reductions from existing sources at a ratio of greater than one-to-one. Only by the implementation of an NSR rule mandating the implementation of BACT by new sources and the provision of emission offsets for larger emission increases could the public be protected from significant increases in ambient air pollution, which—even if they were not directly responsible for causing an ground-level air quality standard violation—would significantly contribute to the deterioration of regional air quality.

ARB's concern was especially important in connection with the then-prevalent air quality violations of the ozone standard, because new sources did not emit ozone. Rather, their emissions of volatile organic compounds and oxides of nitrogen would cook in the sunlight and result in bad air quality (and ozone standard violations) 50 miles or more downwind, without there being any direct way at the time to track those violations back to the sources of the precursor emissions.

The problem with carbon dioxide is virtually identical to the problem 40 years ago, with BAAQMD's failure to cap emissions from new sources that could not be shown to directly cause an air quality standard violation, except that now the problem is global rather than merely regional. Capping new emissions of carbon dioxide is an essential element of our society's efforts to control climate change, and such caps do not constitute "emission reduction rules" in the classic sense.

Rather, the purpose of the NSR rule since 40 years ago has been to prevent or minimize *increases* in emissions from new or modified sources; it is not to *reduce* emissions from existing sources. Indeed, these two aspects of air pollution control are complementary, but they are necessarily directed at different classes of sources and have different purposes and rationales. Emission reduction rules are necessary to reduce existing, typically permitted levels of emissions from existing sources. For example, to move toward attainment of the ozone standard, the District adopted a broad range of rules directed at numerous specific source categories of the emissions of volatile organic compounds. The "emission reduction" rules specifically called out in H&SC §38594(b) are precisely the sorts of rules that the District adopted for many years to address emissions of volatile organic compounds from existing sources, except that—in the case of carbon dioxide emissions from existing sources—ARB is engaged in implementing a market-based compliance mechanism (rather than a source category by source category set of command and control rules) that is intended to result in decreases in such emissions from existing sources.

Although NSR rules intended to prevent significant emission *increases* from new or modified sources are a necessary complement to efforts to *reduce* emissions from existing sources, the purpose, effect, and methodology used in the implementation of NSR are entirely different from the manner in which emission reduction rules function. Indeed, it is deceptive and specious for the Air District to attempt to assimilate the very different purposes, functions, and methodologies of NSR to those of traditional command and control emission reduction rules. Yet, by refusing to include increases in carbon dioxide emissions from new or modified sources in its revised NSR rule, BAAQMD is misleading the public by falsely analogizing its NSR program to its entirely separate efforts to develop source-category-specific emission reduction rules. Such deception should not be countenanced by the Air District's Board of Directors.

This section also ignores the evolution of the Air District's toxic NSR program. This is critical information to include, because the need to regulate GHGs today is even more compelling than the reasons the Air District provided when it began to incorporate air toxic evaluation in its NSR program about 30 years ago. In that context, the process BAAQMD used for toxics is instructive: Air toxics were regulated for 30 years simply by the inclusion of minimal language establishing a toxics policy without an explicit standard or procedure set forth in the NSR rule. The public and Board members need to understand the implications of this innovative action the Air District took in the 1980s and why such leadership is not being employed toward the GHG pollutants that impact the planet's life-support systems with such comprehensive, destructive power.

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

1. This section goes into some length to discuss the meaning of the Supreme Court's 2014 decision in the *Utility Regulatory Group v. EPA* case, 134 S.Ct. 2427 (2014), that EPA may not regulate emissions from a facility solely because of GHG emissions. This decision does not materially affect the Air District's authority to regulate a facility solely because of GHG emissions, however, and the Staff Report should clearly point that out. The analogy here is the fact that the Air District regulated toxic emissions for

decades when EPA had no such program or asserted authority. Indeed, going back to the early years of the Clean Air Act, it has been incontrovertible—and the leading cases are all in support of this proposition—that states may take actions that are **more stringent** than what EPA may be authorized to do under federal law. Thus, it is misleading for the Air District to create the impression that a federal court decision that imposes restrictions on EPA action would, or should be seen as, impacting state authority.

- 2. This section also contains the glaring oversight of neglecting to discuss the Air District's own relevant actions—e.g., that in 2013, the Air District Board of Directors voted for a Resolution Adopting a Greenhouse Gas Reduction Goal and Commitment to Develop a Regional Climate Protection Strategy (Climate Resolution). The findings stated in the Climate Resolution made a profound case for urgent action and, in effect, laid the groundwork and justification for Air District action to regulate GHGs through programs of its own design, not mandated by federal or state requirements. This is a significant action and deserves discussion in this section of the Staff Report.
- 3. Furthermore, the urgency of regulating GHG emissions established by the 2013 Climate Resolution supports the conclusion that the standard of maximum allowable increases in global temperature correlates with the massive emission reductions needed to achieve it.

The Air District's permit program addresses GHGs in the regulatory framework of the federal PSD program. The usage of the PSD standard explicitly suggests that there is an allowable level that climate pollution may increase in the region. Yet the Air District's 2017 Clean Air Plan clearly shows that regional GHG emissions need to be reduced from about 85 MMT/year (in 2015) to about 15 MMT/year (Figure 3-9, p. 3/19) and lays out in detail (pp. 3/2-3/12) a range of grim present and future impacts that such pollution is having and will have on public health in the region.

A more accurate approach to regulation of GHGs would be to consider them non-attainment pollutants under NSR. Such a designation would make clear that we are grossly out of attainment with the GHG emission levels necessary for a two-thirds chance to hold climatic warming to 2°C and that the objective is to allow no further increases. A non-attainment approach would naturally lead the Air District to design a regulatory program to work toward achieving the necessary reductions, as described by the Clean Air Plan and as directed by the Board when it adopted the Climate Resolution.

Indeed, the Air District's action in 2013 establishes the logic of regarding GHGs as non-attainment pollutants, deserving of stringent trigger levels for permitting, and the imposition of BACT to both curb increases and propagate the use of the best control strategies as they evolve. State action has suggested a similar understanding of GHG emissions and what the allowable standard is. We already emit GHGs well over the standard needed to keep the rise in global temperature to below 2°C. This agency should therefore take the appropriate corresponding action: namely, to impose BACT and offset requirements on proposed increases in carbon dioxide emissions that would trigger NSR thresholds.

Proposed Rules 2-1 and 2-2 do not adhere to Board and Air District commitments as expressed in both the Climate Resolution and the 2017 Clean Air Plan just adopted. If the Air District moves forward without adopting a "no net increase" approach despite being so wildly out of attainment with the adopted GHG standard, it exposes a lack of seriousness about doing its part to protect the global climate, as commanded in the Air District's mission statement. Intellectual honesty requires the use of the non-attainment framework for GHG pollution, not the PSD standard.

IV. Additional Revisions Considered During Rule Development Process

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

1. While we certainly support increased Air District oversight of refinery crude slates, it seems clear that a change in crude slate by its very nature represents at least a potential change in emissions, and thus already meets the descriptions in 2-1-233 and 2-1-234 of a "physical change, change in the method of operation, or other similar change at an existing source that may affect air pollutant emissions" (emphasis added). It follows that a change in crude slate is already subject to Rule 2-1-233 or 2-1-234 as currently written. The fact that the Air District has not recognized this for refinery crude formulations before now is an oversight that needs to be corrected in Air District permitting procedure.

Indeed, the Air District makes a clear case in the Staff Report for addressing refinery crude slate changes thusly:

As explained in detail in the May 2017 Workshop Report, Staff proposed this provision in order to help the District enforce its New Source Review permit requirements when refineries change their crude slates. If a refinery changes its operations in order to accommodate different crude slates in a way that will increase emissions, such a change is a "modification" that requires an NSR permit. But if the refinery goes ahead and makes such a modification without applying for or obtaining an NSR permit, the Air District may not ever know about the modification because the change may be subtle and not immediately obvious to District inspectors.

- 2. The original proposed approach to ensure that a federally enforceable modification doesn't take place without first obtaining a permit was to explicitly require prior approval for any "significant crude slate change." The effort to define a significant crude slate change in these proposed permit rule amendments has been abandoned. The plain fact of the matter is that regardless of whether or not the Air District includes a definition of "significant crude slate change" in its rules, changes to a refinery's actual crude slate emissions that exceed federal thresholds without first obtaining a permit modification are violations.
- 3. The Air District, having raised the possibility that Air District inspectors cannot detect such a violation, raises significant follow-on questions of responsibility, permit requirements, and emissions tracking. The more direct solution to this supposedly complicated dilemma is to require refineries to document actual crude slate composition used in real time, calculate emissions based on that crude slate profile averaged over each month, and maintain a rolling twelve-month total emission report. This is essentially how emissions are tracked for tens of thousands of other sources subject to Air District permits. Refineries, by far the region's largest sector of stationary source emissions, have escaped this requirement from being imposed on crude slate changes. This loophole is eminently correctable. Now that the EPA has mandated that the Air District use actual emission increases (instead of potential to emit) as the basis of determining when a significant emission threshold has been crossed, the Air District and the regulated community need to assure the public that all operations are in compliance. The Air District appears to be shirking due diligence in using common procedures to track these emissions in real time from refineries as it does for virtually every other permitted source.

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

- 1. As stated previously in this letter, we believe it is flatly apparent the Air District is misusing AB 398 to renege on its commitment to impose BACT on GHG emission increases for all new and modified sources. We will not restate again here the clear distinction between an "emission reduction rule" and the purpose and methodology of a rule like NSR.
- 2. Even given the maximalist interpretation of AB 398 proffered by BAAQMD, the agency is simply ignoring the many small and medium-sized permitted sources that do emit GHGs but are *not* subject to the Cap and Trade program. These small and medium-sized sources may cumulatively amount to a large emissions burden and cannot be overlooked, even given staff's current legal position.

The Air District's Climate Protection Program dates back to 2005. In that time, the Air District has taken very little permit-related regulatory action on GHGs. It is long past time for the District to set a meaningful BACT threshold for GHG emissions. We propose that the threshold be set at 500 pounds per day. This threshold will not marginally increase the number of permits the Air District must issue, and the addition of GHG data is not burdensome. In addition, some high-quantity source categories are homogeneous and BACT analyses can be reproduced easily. By taking this approach, the Air District would be able to achieve potential reductions from small and medium-sized sources without an onerous permitting load.

Our GHG emissions are already far, far above what they need to be to prevent a range of catastrophic eventualities from besieging the region.

In reality, setting a low BACT threshold for GHGs is a minor change to Air District business, as most permit applications are routine. Changes to BACT determinations evolve very slowly. That said, setting a low programmatic BACT threshold allows for the newest information to be incorporated when it becomes available. These are opportunities not to be missed by deliberate program design. The overall success of reducing criteria air pollutants through knowledge gained via the minor NSR permitting program should be noted and replicated with GHGs fully incorporated into the minor and major NSR programs.

Conclusion

Serious action by the Air District to address our GHG pollution crisis on the front end—i.e., through its permitting program, is long overdue. Regulation 2 should be overhauled to provide a complete framework to regulate GHG emissions from new and modified sources. AB 398 provides no excuse at all for inaction on this matter.

Thank you for the opportunity to review and provide comments on the Air District's proposed amendments to Regulation 2—and the lack thereof.

Sincere regards, on behalf of 22,000 members of 350 Bay Area,

Larry Chaset Attorney At Law Sustainable Energy Futures Janet Stromberg
BayCAP Campaign Lead

Jed Holtzman Senior Policy Analyst