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VIA EMAIL
Bay Area Air Quality Management District
Carol Lee
Greg Stone
939 Ellis Street
San Francisco, CA 94109
clee@baaqmd.gov
gstone@baaqmd.gov

RE: CBE Comments on BAAQMD's Proposed Amendments to BAAQMD Regulation 1 (General Provisions), and Regulation 2 (Permits) Rule 1 (General Requirements), Rule 2 (New Source Review) and Rule 4 (Emissions Banking)

The Bay Area Air Quality Management District ("District", "BAAQMD") proposes numerous and substantial amendments to its New Source Review and related rules to address, *inter alia*, EPA's partial disapproval of BAAQMD's PSD Rule. Communities for a Better Environment ("CBE") is an environmental health and justice organization that works in and with working class communities and communities of color in California's urban areas, particularly the Bay Area. CBE and its members have a long track record of working with the District to secure health protections—such as the District's landmark Flare Regulation. We provide the following comments on the proposed amendments.

CLIMATE CHANGE

Climate change poses a real and definite threat to Bay Area residents and beyond. In fact, the Bay Area is a significant contributor to California's GHG emissions.[1] As one of the largest California Air Districts, BAAQMD is critical to securing our future. AB 32 specifically calls upon Air Districts to help achieve the needed reductions to reach the program's goals.[2]

An article reprinted in the New York Times last week explains that, "agencies like the Bay Area Air Quality Management District urge cities to adopt policies that could protect their residents from climate change," but legitimately complains of the lack of coordinated effort. The District is in the position to set air policy for the entire region that would establish the floor for the local cities and municipalities. In fact some leaders are waiting for agencies like BAAQMD to provide direction. *Id.*

[1] See Climate Change and the Bay Area Joint Policy Committee November 17, 2006.
[2] Health & Safety Code § 38592(a).

A primary purpose of the District's proposed amendments is to incorporate recent EPA mandated requirements for greenhouse gases ("GHGs").[3] Under federal law, the trigger for requiring BACT for GHGs is 100,000 tons/year CO2e. State law must be at least as stringent as federal law. We urge the District to adopt a lower GHG trigger for BACT. Doing so will help Bay Area's polluting facilities move beyond what federal programs already require. Given that the Air District has previously set ultra low triggers for BACT, this is in perfect keeping with its previous efforts.

The Joint Policy Committee, of which BAAQMD is a part, has noted that business as usual is not enough, and that while some strategies will be relatively painless, others may be costly or difficult. Now is the District's opportunity to set a low trigger for GHGs and be a leader in the climate change arena.

OFFSETS

Offsets, particularly when they are offsite and non-contemporaneous, ignore pollution impacts on communities, especially environmental justice communities where large and/or numerous polluting facilities are located. The offset amendments allow facilities to increase pollution locally and offset that pollution in another area or even another air basin. This choice harms health. To use one example, NOx and organic carbon emissions take only moments to form PM, which causes significant health impacts. And as new studies show, the national standard for PM2.5, which EPA adopted in 2006 and that the District is proposing to comply with, does not fully protect the public from what happens after the combustion of fossil fuels—some of the pollutants interact after they are emitted and become denser and more harmful.[4] A regulation that allows polluting facilities to pollute locally and offset the pollution elsewhere should not be included in the District's proposed PSD program. Interdistrict offsets clearly exacerbate these problems as it is one more option to avoid feasible local pollution controls. The District should eliminate interdistrict trading from the proposed amendments.

The District's decision to allow the use of POC reductions to offset NOx emissions is also extremely problematic. First, no one knows exactly how much reducing POCs while allowing NOx to increase will affect smog in the Bay Area and downwind. But additionally, the assumption that ozone formation in the Bay Area is VOC limited, thereby justifying the allowed use of POCs to offset NOx increases, is incomplete. Both NOx and POC are PM precursors. Secondary PM is not VOC limited and more of it may

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[3] BAAQMD Workshop Notice p. 1.

[4] See Perraud et al., 2012. Nonequilibrium atmospheric secondary organic aerosol formation and growth. *PNAS* 109(8): 2836–2841. DOI 10.1073/pnas.1119909109 (attached hereto); de Gouw et al., 2011. Organic aerosol formation downwind from the Deepwater Horizon oil spill. *Science* 331: 1295–1299. DOI 10.1126/science.1200320 (attached hereto); New York Times, "Scientists Find New Dangers in Tiny but Pervasive Particles in Air Pollution", February 18, 2012 (attached hereto).

in fact form from semi-volatile and intermediate-volatility carbon compounds.[5] Just as the District wrongly assumed that methane is not a smog precursor the District threatens to improperly exempt a major organic compound precursor class (semi-and intermediate volatility organic compounds)[6] from its requirements, thereby allowing uncontrolled particulate matter pollution. This interpollutant trading should not be included in the PSD rule.

Offsets must be quantifiable, surplus, permanent and enforceable.[7] EPA points out in its comments that the District currently allows offsets that are not surplus. The Staff Report's response to EPA is not valid. The Statement that "[t]he New Source Review provisions of the Clean Air Act require the operator of the new or modified facility to provide the necessary offsets at the time that the application is approved" is incorrect. That provision was changed in 1990, more than twenty years ago. The Act now plainly states that "[s]uch emission reductions shall be, *by the time a new or modified source commences operation*, in effect and enforceable **and** *shall* [at that time] *assure* that the total tonnage of increased emissions of the air pollutant from the new or modified source shall be offset by an equal or greater reduction . . ."[8] The District instead proposes a multi-year equivalence demonstration. But such a demonstration should not be relied upon to delegate the federal PSD program. If the District wants a fully delegated PSD program, and this program includes offsets, the District must ensure that the offsets actually are surplus at the time the project begins and before a new source adds pollutants to the environment.

CEQA

The proposed amendments are subject to CEQA and an EIR should be prepared. The District's assertion that the "common sense exemption" applies is not correct.[9] The Common-Sense Exemption provides that "[w]here it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA."[10] Because exemptions operate as exceptions to CEQA, they are narrowly construed.[11] Under the Common-Sense Exemption, if a reasonable argument suggests that a project might have a significant impact, the agency has the burden to refute that argument to a certainty, in order to rely on the exemption.[12] In a case involving air quality regulations, even a new regulation

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[5] See Perraud et al., 2012 as cited above; de Gouw et al., 2011 as cited above.
[6] *Id*.
[7] CAA § 173(c), 40 CFR 51.165(a)(3)(ii)(C)(i), 40 CFR part 51, Appendix S.
[8] CAA § 173(c)(1).
[9] 14 C.C.R. §§ 15061(b)(2) and § 15300 *et seq*.; See Staff Report p. 3.
[10] 14 CCR § 15061(b)(3).
[11] *See, e.g., Santa Monica Chamber of Commerce v. City of Santa Monica* (2002) 101 Cal.App.4th 786, 793.
[12] *Davidon Homes v. City of San Jose* (1997) 54 Cal.App.4th 106, 118.

that attempts to tighten environmental requirements is not entitled to exemption if the new requirements will have potentially significant effects.[13]

Applying common sense, the amendments could cause significant environmental impacts due to the changed definition of "emission offsets;" offset provisions more generally—due to the current and emerging environmental landscape; the unexplored interactions between the numerous proposed changes; the fact that these rules would actually replace the current protections received under the federal PSD program, and the weakening of current rules.

The proposed offsets and banking rules describe considerations for reducing ozone formation in the Bay Area, but those rules completely fail to consider the disproportionate impacts of its choices on low-income communities that suffer greatly from local NOx pollution.[14] NOx can convert to particulate matter within seconds. It is well established that PM causes significant health impacts locally.[15] Among other things, the amendment revises the definition of "emission offsets" to allow the use of interdistrict emission reduction credits. This enhances the ability of large polluters to increase pollution locally in communities that are already disproportionately impacted. The impacts of this increase must be analyzed.

The amendment also ignores the trend toward inherently dirtier crude oil. The amendment has a reasonable potential to result in significant environmental impacts by allowing locally increased emissions of combustion products as oil refineries retool to process lower quality crude. An historic switch to such denser, higher sulfur, marginally cheaper crude has already begun nationwide[16] and threatens to accelerate in California now.[17] Making gasoline, diesel, and jet fuel from denser, higher sulfur crude requires more intensive processing that takes more energy—burning more fuel in refineries. Average fuel energy burned per barrel crude processed could *double or triple* if refineries switch to low quality oils such as so-called heavy and tar sands oils, based on analysis of nationwide and California data.[18]

Burning more fuel to process such "dirtier" crude increases refinery emissions of combustion products. These combustion emissions include among other pollutants CO_2,

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[13] *Dunn-Edwards Corp. v. Bay Area Air Quality Mgmt. Dist.* (1992) 9 Cal.App.4th 644.
[14] Staff Report pp. 5-6.
[15] See comment above regarding amendments to allow POCs to offset NOx emissions.
[16] See U.S. Energy Information Administration data (www.eia.gov/petroleum/data.cfm).
[17] UCS, 2011. *Oil Refinery CO_2 Performance Measurement.* Technical analysis prepared for UCS by G. Karras, Communities for a Better Environment (CBE). Union of Concerned Scientists, Berkeley: CA. September 2011 (attached hereto).
[18] Karras, 2010. Combustion emissions from refining lower quality oil: What is the global warming potential? *Env. Sci. Technol.* 44(24): 9584–9589. DOI 10.1021/es1019965 (attached hereto); and UCS, 2011 as cited above (attached hereto).

$PM_{2.5}$, and $PM_{2.5}$ precursors such as NOx, SOx, and organic compounds. (Organic PM precursors include semivolatile and intermediate volatility compounds that are not fully monitored or controlled.[19]) Increased combustion emissions from refining "dirtier" crude would worsen disparately higher localized exposures to health-threatening air pollution. For example, disparately elevated levels of $PM_{2.5}$ that exceeded the state's ambient air standard in the air *inside* people's homes were linked to combustion emissions from a nearby refinery and port by peer reviewed analysis of data collected in the Bay Area.[20]

This switch to refining even lower quality crude would be initiated within the District by expansion of equipment that enables the more intensive processing described above. The same vacuum distillation, cracking, coking, aggressive hydroprocessing, and/or sulfur recovery equipment that would expand to refine denser and/or higher sulfur crude[21] is equipment subject to District permits. By permitting such fundamental changes in refinery source equipment through offsets, PSD, emission banking, and/or new source review implementation policies that ignore localized impacts and thus allow refineries to pollute locally, the proposed amendments are likely to result in significant air quality impacts and worsened environmental injustice.

The stated central purpose of these amendments is to obtain approval for the District's PSD rule. Under the proposal, the District's rule would replace the federal program. The fact that the public will lose the protections of EPA's program as a result of the amendments, and the stay and appeals procedures provided as part of that program, is a potentially significant negative change. For instance, EPA discourages interpollutant trading due to scientific uncertainty of acceptable pollutant ratios and hence the effectiveness of the offsets.[22] While interpollutant trading is permitted under certain conditions as a compromise, the District proposes a further compromise, which is to complete a study. Again, impacts on communities, not just air quality from a regional perspective, must be considered in an EIR.

Some of the added exemptions also mean a loss of the current protections afforded through the federal program. For example, an exemption for asbestos and asbestos related material is proposed on the grounds that this is handled under a District registration program. However, this registration program would not be part of the federally delegated PSD program and could be modified or removed at any time. It is therefore not equally protective.

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[19] See Perraud et al., 2012 as cited above; de Gouw et al., 2011 as cited above.
[20] Brody et al., 2009. Linking exposure assessment science with policy objectives for environmental justice and breast cancer advocacy: The Northern California Household Exposure Study. *Am. J. Public Health.* 2009(99): S600–S609. DOI 10.2105/AJPH.2008.149088 (attached hereto).
[21] Karras, 2010 as cited above; UCS, 2011 as cited above.
[22] See Staff Report p. 5.

Some modifications also seem to allow backsliding, which is clearly less protective. For instance, the District deleted section 2-2-222, PSD modeling that includes all pollutants, and replaces it with a definition of the term "Pollutant-Specific Basis." This new definition explicitly limits the pollutants that are considered in a BACT analysis,[23] providing that BACT requirements apply on this limited pollutant-specific basis.[24] This backsliding is, at minimum, subject to CEQA. It is also likely a violation of California's SB 288, an anti-backsliding statute that prohibits Air Districts from making their local NSR and PSD rules less stringent.[25] A decision to actively omit pollution data in the BACT calculus or omit information about pollution from a proposed project is a significant impact that requires CEQA analysis.

The Common-Sense Exemption is reserved for those "obviously exempt" projects "where its absolute and precise language clearly applies."[26] Here, the District has not and cannot show that there is no possibility of an adverse impact from its amendments. Therefore, an EIR should be prepared.

CONCLUSION

CBE appreciates the many improvements to the proposed rule amendments. At the same time, we have significant concerns. CBE recommends that staff remove or revise the offset provisions due to their impacts on disproportionately impacted communities. If these provisions are not removed, interdistrict and interpollutant trading, at minimum, should not be permitted. The District should retain its multipollutant BACT analysis. The District also must perform a CEQA analysis to understand the potentially significant impacts of this project. Finally, we strongly recommend that the District set a low threshold for GHG emissions in its amendments to steer the Bay Area as a whole on the right course towards sorely need GHG reductions.

In Health,

/s/ /s/

Adrienne Bloch Greg Karras

[23] "If a regulatory requirement applies on a pollutant-specific basis, the requirement applies only for the individual pollutant(s) for which a source or facility meets the relevant applicability criteria and does not apply for pollutant(s) for which the source or facility does not meet the relevant applicability criteria." (Proposed 2-2-22)
[24] Proposed rule, 2-2-301.
[25] Health & Saf. Code §42500, et seq.
[26] *Myers v. Bd. of Supervisors* (1976) 58 Cal.App.3d 413.