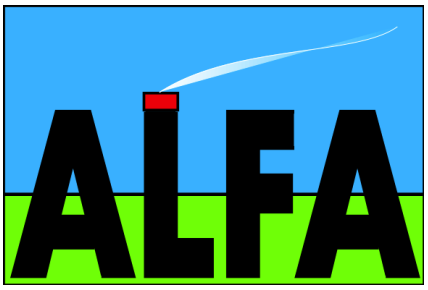

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February 18, 2020

Mr. John Ungvarsky
Air Planning Branch
Air and Radiation Division
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA, 94105

**Re: Docket ID No. EPA–R09–OAR–2019–0241**

Dear Mr. Ungvarsky:

On behalf of the Center for Biological Diversity and the Center for Environmental Health, Air Law for All, Ltd. submits the following comments to Docket No. EPA–R09–OAR–2019–0241 in opposition to EPA's proposed action, "Approval of Air Quality Implementation Plans; California; Coachella Valley; 8-Hour Ozone Nonattainment Area Requirements," 85 FR 2949 (Jan. 17, 2020).

## I. EPA'S PROPOSED APPROVAL OF NOx SUBSTITUTE REDUCTIONS FOR RFP IS ARBITRARY AND CAPRICIOUS, NOT IN ACCORDANCE WITH PROCEDURE REQUIRED BY LAW, AND CONTRARY TO LAW

EPA proposes to approve NOx substitute reductions for the 3% per annum VOC reductions required under section 182(c)(2)(B).[1] As EPA notes, NOx substitution is permitted under EPA's rules for implementation of the 2008 ozone NAAQS;[2] however those rules still require compliance with section 182(c)(2)(C).[3]

Specifically, section 182(c)(2)(B) requires a demonstration that "the plan, as revised, will result in VOC emissions reductions from the baseline emissions" equal to "at least 3 percent of baseline emissions," averaged over three-year periods until the attainment date. The plan may achieve lesser VOC emission reductions under section 182(c)(2)(B)

[1] 42 U.S.C. § 7511a(c)(2)(B).
[2] 85 FR at 2964 n.103.
[3] 40 C.F.R. § 51.1110(a)(2)(ii)(B) ("Use of NOx emissions reductions must meet the criteria in CAA section 182(c)(2)(C)."

(ii) "if the State demonstrates to the satisfaction of the Administrator that the plan reflecting such lesser amount includes all measures that can feasibly be implemented in the area, in light of technological achievability," which EPA does not claim is the case here, or if the State provides an alternative demonstration under section 182(c)(2)(C).

Section 182(c)(2)(C) allows in lieu of section 182(c)(2)(B) for a combination in reductions of VOC and NOx emissions if the plan revision contains

> a demonstration to the satisfaction of the Administrator that the applicable implementation plan, as revised, provides for reductions of emissions of VOC's and oxides of nitrogen (calculated according to the creditability provisions of [sections 182(b)(1)(C) and 182(b)(1)(D)]), that would result in a reduction in ozone concentrations at least equivalent to that which would result from the amount of VOC emission reductions required under [section 182(c)(2)(B)].

Here, the submittal fails to show that the substitute NOx emission reductions "result in a reduction of ozone concentrations at least equivalent" to the required 3% per annum VOC emission reductions. EPA's proposed approval is therefore arbitrary and capricious and contrary to law. Furthermore, EPA fails to give notice of how the submittal addresses this required demonstration; thus EPA's proposal is not in accordance with procedure required by law.

### A. "The Relative Roles of VOC and NOx in Ozone Formation"[4]

The key to the chemistry of ozone formation is the "hydroxl radical," denoted OH.[5] The hydroxyl radical is very reactive, and VOCs and NOx compete to react with it. "At a high ratio of VOC to NOx concentrations, [the hydroxyl radical] will react mainly with VOCs; at a low ratio the NOx reaction can predominate."[6]

As a result of this competition for the hydroxl radical,

> [a]t a given level of VOC, there exists a NOx concentration at which a maximum amount of ozone is produced, an optimum VOC:NOx ratio. For ratios less than this optimum ratio, NOx increases lead to ozone decreases; conversely, for ratios larger than this optimum ratio, NOx increases lead to ozone increases.[7]

When NOx levels are above this "optimum"[8] ratio, then the situation is described as "NOx saturated."[9] In this case a reduction in NOx levels can lead to increases in ozone levels. On the other hand, if NOx levels are below the "optimum," the situation is described as "NOx limited"; this raises the possibility that VOC reductions (at least up to the point that the optimum ratio is restored) will have little effect on ozone levels.[10]

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[4] John H. Seinfeld & Spyros N. Pandis, ATMOSPHERIC CHEMISTRY AND PHYSICS: FROM AIR POLLUTION TO CLIMATE CHANGE 238 (Wiley Interscience, 2d. ed. 2006).
[5] *Id.*
[6] *Id.*
[7] *Id.* at 236.
[8] Again, "optimum" here is used in the sense of a maximum amount of ozone produced
[9] *Id.* at 238.
[10] *Id.*

As EPA itself states, due to complexity of the issue, "ozone response to precursor can vary greatly with each area."[11] This is confirmed by the National Academy of Sciences:

> Application of grid-based air quality models to various cities and regions shows that the relative effectiveness of controls of volatile organic compounds (VOCs) and oxides of nitrogen (NOx) in ozone abatement varies widely ..... These cities share an ozone problem, but differ widely in the relative contributions of anthropogenic VOCs and NOx and biogenic emissions. As a result, the optimal set of controls relying on VOCs, NOx, or most likely, reductions of both, will vary from one place to the next.[12]

### B. The 1990 Congress Was Aware of These Issues

First, section 185B (added in the 1990 Amendments along with the other relevant ozone provisions) required EPA in conjunction with the National Academy of Sciences to "conduct a study on the role of ozone precursors in tropospheric ozone formation and control."[13]

> The study shall examine the roles of NOx and VOC emission reductions, the extent to which NOx reductions may contribute (or be counterproductive) to achievement of attainment in different nonattainment areas, the sensitivity of ozone to the control of NOx, the availability and extent of controls for NOx, the role of biogenic VOC emissions, and the basic information required for air quality models.

Thus, Congress was aware that NOx reductions might be counterproductive, and that ozone concentrations might vary in sensitivity to NOx reductions, and directed EPA to study these issues.[14]

Second, section 182(f) requires the provisions for major stationary sources of VOCs to also apply to major stationary sources of NOx, except in three instances:

- "when the Administrator determines (when the Administrator approves a plan or plan revision) that net air quality benefits are greater in the absence of reductions of oxides of nitrogen from the sources concerned."[15]
- for ozone nonattainment areas not in an ozone transport region, when EPA "determines (when the Administrator approves a plan or plan revision) that additional reductions of oxides of nitrogen would not contribute to attainment of the national ambient air quality standard for ozone in the area";[16] or

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[11] Office of Air Quality Planning and Standards, "The Role of Ozone Precursors in Tropospheric Ozone Formation and Control: A Report to Congress," EPA-454/R-93-024, at 2-2 (July 1993) (report to Congress mandated by section 185B, 42 U.S.C. § 7511f), *available at* https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000DEUD.TXT.

[12] *Id.* at 2-4 (quoting National Academy of Sciences, National Research Council, "Rethinking the Ozone Problem in Urban and Regional Air Pollution" (National Academies Press, 1991)).

[13] 42 U.S.C. § 7511f.

[14] The discussion of the relative role of VOC and NOx in ozone formation, *supra* section I.A, in part quotes the reports by EPA and the National Academy of Sciences under section 18%B.

[15] 42 U.S.C. § 7511a(f)(1).

[16] *Id.* § 7511a(f)(1)(A).

- for ozone nonattainment areas in an ozone transport region, when EPA "determines (when the Administrator approves a plan or plan revision) that additional reductions of oxides of nitrogen would not produce net ozone air quality benefits in such region."[17]

Thus, Congress anticipated the scenario mentioned above, where NOx decreases may not decrease ozone concentrations.

Third, section 182(c)(2)(C) itself directs EPA to

> issue guidance concerning the conditions under which NOx control may be substituted for VOC control or may be combined with VOC control in order to maximize the reduction in ozone air pollution. In accord with such guidance, a lesser percentage of VOCs may be accepted as an adequate demonstration for purposes of this subsection.[18]

This again shows Congress in the 1990 Amendments was aware of the issues and provided for them.

### C. EPA's Approach to These Issues in Other Contexts

One context in which the relative effectiveness of VOC and NOx controls is critical is interpollutant offset trading under the nonattainment new source review ("NSR") program. Under the nonattainment NSR program, which applies in nonattainment areas such as the Coachella Valley, a new major stationary source or a major modification of an existing major stationary source must obtain offsets for its increased emissions of the relevant pollutants.[19] In the case of an ozone nonattainment area such as the Coachella Valley, the relevant pollutants are VOCs and NOx. Sources may obtain these offsetting reductions from surplus emission reductions at other sources, for example, from a permanent shutdown of another source.[20]

For an ozone nonattainment area, the question arises: can NOx emission reductions be used to offset VOC emission increases, and vice versa? EPA's rules allow for this if an appropriate demonstration is made.[21] EPA has issued guidance on the demonstration.[22] The guidance addresses two scenarios:

- A demonstration for a particular source; and
- A demonstration for a particular area.

For a particular new major stationary source or major modification, EPA expects photochemical grid modeling of three scenarios:

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[17] *Id.* § 7511a(f)(1)(B).
[18] 42 U.S.C. § 7511a(c)(2)(C). As explained below, *see infra* section I.E.3, the guidance at issue here is not the guidance Congress required.
[19] 42 U.S.C. § 7503(c)(1).
[20] 40 C.F.R. § 51.165(a)(3)(C)(1).
[21] *Id.* § 51.165(a)(11)(i).
[22] EPA-454/R-18-004, "Technical Guidance for Demonstration of InterPrecursor Trading (IPT) for Ozone in the Nonattainment New Source Review Program," Office of Air Quality Planning and Standards (May 2018), *available at* https://www.epa.gov/sites/production/files/2019-02/documents/ipt2018.pdf.

- A baseline scenario without the new source or modification;
- A post-construction scenario, without the offsetting credits; and
- A scenario including the credited offsets.[23]

Using these results, an interpollutant trading ratio of NOx and VOC is developed. For example, the modeling may demonstrate that a reduction of 10 tons per day ("tpd") of credited NOx reductions may offset an increase of 2 tpd of VOC from the construction of the new or modified source, resulting in a NOx:VOC trading ratio of 5:1.[24] The trading ratio should be quality assured and its appropriateness should be evaluated using emission inventory and ambient air quality data.

"[E]mission sensitivities typically vary across an area," so the approach for an area is somewhat different.[25] It

> involves modeling multiple hypothetical sources with varying emission rates and stack release characteristics typical of sources in the area or region. These sources would need to be located in different parts of the area to account for differences in sensitivities that may be possible when considering air quality impacts of sources located in different parts of the area.[26]

The second context is demonstrations under section 182(f). As described above, under section 182(f), in ozone nonattainment areas, major stationary sources of NOx are subject to the same requirements as major stationary sources of VOCs, unless the state can make one of three demonstrations. In 1993, EPA issued guidance regarding these demonstrations.[27] In each case, EPA recommended photochemical grid modeling of at least two scenarios (e.g. NOx control versus no NOx control). EPA updated the section 182(f) guidance in 2005; it continues to recommend photochemical grid modeling for the relevant scenarios.[28]

The common thread across these contexts is that multiple scenarios must be modeled. This is inevitably the case due to the complex relationship of VOC and NOx. However, the submittal for the Coachella Valley does not use a photochemical grid model to determine if the substitute NOx emission reductions result in equivalent ozone reductions.[29]

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[23] *Id.* at 6-8.
[24] As explained above, this ratio may vary depending on the relative overall levels of NOx and VOC and the particular characteristics of the area; it may also vary due to the particular characteristics of the new or modified source and the offsetting source, such as location and stack height.
[25] *Id.* at 8-9.
[26] *Id.* at 9.
[27] Memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, "Guideline for Determining the Applicability of Nitrogen Oxide Requirements under Section 182(f)" (Dec. 16, 1993), *available at* https://archive.epa.gov/ttn/ozone/web/pdf/sec182f.pdf.
[28] Memorandum from Stephen D. Page, Director, Office of Air Quality Planning and Standards, "Guidance on Limiting Nitrogen Oxides (NOx) Requirements Related to 8-Hour Ozone Implementation" (Jan. 14 2005), *available at* https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20050114_page_guidance_8-hr_ozone_nox_exemptions.pdf.
[29] While the submittal does use photochemical grid modeling for the attainment demonstration, the results of that modeling do not rationally relate to the required demonstration for section 182(c)(2)(C). *See infra*, section I.E.1.

### D. EPA Fails to Give Adequate Notice of Its Proposed Interpretation of Section 182(c)(2)(C)

As mentioned above, if a state wants to avail itself of the option for NOx substitution in section 182(c)(2)(C), the state must demonstrate that the SIP revision "provides for reductions of emissions of VOCs and [NOx] … that would result in a reduction in ozone concentrations at least equivalent to" the three percent per annum VOC reductions required under section 182(c)(2)(B).[30]

Table 5 of the proposed rule contains the core of the purported demonstration for the Coachella Valley nonattainment area. The procedure used simply compares percentages of VOC and NOx reductions, treating a percentage of NOx reductions as equivalent to a percentage of VOC reductions. For example, for the milestone year 2017, the table shows a 5.6% shortfall in VOC reductions and states that a 5.6% amount of NOx reductions makes up this shortfall.[31] But the proposed rule does not explain why a 5.6% reduction (for example) in NOx emissions results in equivalent **ozone reductions** to a 5.6% reduction in VOC emissions. Section 182(c)(2)(C) requires a demonstration that the substitute NOx reductions result in equivalent reductions in ozone concentrations.

A little digging reveals a potential explanation. A guidance memorandum issued in 1993 recommends the procedure that appears to have been used in the proposal.[32] However, this guidance is not cited in the notice and is not listed in the docket index, which includes a list of relevant guidance memoranda.[33] It is referenced in the 2005 Emission Inventory Guidance that is provided in the docket.[34]

However, that does not satisfy requirements for adequate notice. The guidance memorandum is non-binding. Thus, the notice for EPA's action must indicate whether EPA intends to adopt the interpretation of the Act set forth in the guidance.[35] EPA did not do so here. Perhaps EPA–as it should–has abandoned the justifications given in the guidance, but nonetheless thinks–as it should not–that the Coachella Valley calculation is still a legitimate demonstration for some other reasons. Thus, EPA must at a minimum re-propose its action.

### E. EPA's NOx Substitution Guidance Is a Guidance in Name Only

The inadequacy of EPA's notice aside, and assuming for the sake of argument that EPA intended to adopt the positions set forth in the NOx Substitution Guidance, EPA's proposal is nonetheless arbitrary and capricious and contrary to law.

Typically, a guidance memorandum for SIPs gives States EPA's recommendations on how to implement the Act. EPA's NOx substitution guidance instead gives recommendations on how to evade the Act. It recommends a procedure that fails to

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[30] 42 U.S.C. § 7511a(c)(2)(C).
[31] The NOx reductions are in total greater than 5.6%; the table denotes the excess as surplus.
[32] NOx Substitution Guidance, Office of Air Quality Planning and Standards, December 1993. This document is included in the compilation "NOx Policy Documents for the Clean Air Act of 1990," Office of Air Quality Planning and Standards, EPA-452/R-96-005 (Mar. 1996).
[33] *See* EPA-R09-OAR-2019-0241-0087 at 9-10.
[34] EPA-R09-OAR-2019-0241-0068 at 21-23.
[35] *See U.S. Magnesium LLC v. U.S. EPA*, 690 F.3d 1157, 1168 (10th Cir. 2012).

demonstrate any equivalence between VOC and NOx reductions contrary to the plain language of the statute; relies on incorrect policy assumptions; and gives legal justifications that are without merit.

### 1. *The Guidance Recommendations Do Nothing To Demonstrate Equivalency*

In summary, the guidance gives the following procedure:

A. Establish the control strategy (i.e. VOC and NOx reductions) and demonstrate using photochemical grid modeling that the control strategy will attain the standards by the applicable attainment date.
B. For interim years, use "*any mix* of annual reductions in VOC and NOx" so long as it is:
    1. "a logical step toward implementing" the control strategy; and
    2. "results in a combined annual VOC and NOx reduction of 3% per year."[36]

Thus, under the guidance, states need not use a photochemical grid model to determine the ozone reductions from 3% per annum VOC reductions, and need not use a photochemical grid model to examine the substitute NOx reductions for equivalency. Immediately, this approach is inconsistent with EPA's recommended approaches for section 182(f) and nonattainment NSR interpollutant offset trading, which expect photochemical grid models will be used for the relevant scenarios.

The guidance's permission to use "any mix of annual reductions in VOC and NOx" is self-refuting: the complex nature of ozone formation (as explained above) ensures that various mixes will actually result in various ozone levels. This contradicts the requirement in section 182(c)(2)(C) for equivalent ozone reductions.

Consistency with the control strategy does nothing at all to address this point. Simply put, the control strategy and attainment demonstration establishes a single data point: this particular combination of VOC and NOx reductions results in this particular amount of ozone reductions. A single data point is insufficient to establish an appropriate ratio for substituting NOx for VOC; it's like claiming that a single point defines a line. That is why EPA expects photochemical grid modeling of multiple scenarios for nonattainment NSR offset trading and for section 182(f).[37]

Furthermore, the control strategy is the result of state choices regarding which sources to regulate. "So long as the national standards are met, the State may select whatever mix of control devices it desires, and industries with particular economic or technological problems may seek special treatment in the plan itself."[38] Thus, the ratio of VOC to NOx controls may depend on other factors, such as politics, so long as the aggregate set of controls attains the standards.

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[36] NOx Substitution Guidance at 9 (emphasis added).
[37] Thus, EPA is entirely wrong to state: "The modeling performed for demonstration of attainment basically establishes the relationship between emission reductions—either of VOC, NOX, or both—and ozone reductions." 70 FR 25688, 25696 (May 13, 2005).
[38] *Union Electric Co. v. EPA*, 427 U.S. 246, 266 (1976) (citing *Train v. NRDC*, 421 U.S. 60, 79 (1975)).

In fact, this raises the spectre that, under EPA's guidance, a state could game the VOC and NOx reductions to achieve favorable NOx substitution. This is particularly problematic in a NOx-saturated situation, where substitute NOx reductions may not achieve any ozone reductions, but may be readily available in the form of emissions reductions from, for example, turnover in mobile sources. We are not suggesting that is the case here; just that this possibility demonstrates EPA's approach is invalid.

### 2. *The Policy Arguments in the Guidance Are Without Merit*

The guidance provides three reasons for not requiring states to develop a specific trading ratio (or "exchange rate") between VOC and NOx emissions:

- The strong likelihood that optimum "exchange" rates vary from year to year and across a geographic area as an area's emissions distribution and atmospheric chemistry change over time.
- Uncertainty in modeling analyses, particularly when attempting to ascertain responses from small percentage perturbations in emissions; and
- Resource limitations associated with modeling specific control measures during interim years before attainment dates.[39]

All are without merit and are also irrelevant as the plain language of the statute requires establishing equivalency.

EPA also offers a justification for using percentage bases for the calculation (i.e. adding the VOC and NOx reduction percentages).[40] It too is without merit.

#### a. **Variation In Emissions and Atmospheric Chemistry Is Not an Excuse**

EPA cites as a justification: "[t]he strong likelihood that optimum 'exchange' rates vary from year to year and across a geographic area as an area's emissions distribution and atmospheric chemistry change over time."

This justification relies in part on a red herring: a proper 182(c)(2)(C) demonstration need not–and if EPA's justification has any merit, should not–establish a single exchange rate (or trading ratio) that applies across the area and across each year. The demonstration can include emission inventories for interim years and use them for photochemical grid modeling of the 3% VOC per annum scenario and the substitute NOx reduction scenario.

And if the justification is true, it applies with much greater force to EPA's recommendations; indeed it refutes EPA's recommended approach.

#### b. **Uncertainty Is Not an Excuse**

EPA cites as a justification "[u]ncertainty in modeling analyses, particularly when attempting to ascertain responses from small percentage perturbations in emissions."

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[39] NOx Substitution Guidance at 4.
[40] *Id.*

Yet EPA expects photochemical grid modeling of the relevant scenarios for a single source for nonattainment NSR offsets; if anything that is an example of small percentage perturbations in emissions. This unexplained inconsistency renders EPA's proposal here arbitrary and capricious.

And uncertainty in modeling is not an excuse to use a completely unjustified approach to the demonstration. If it is true that modeling uncertainty means equivalency cannot reasonably be demonstrated, then NOx substitution is simply not available.

### c. **Resource Limitations Are Not an Excuse**

As a third justification, the guidance cites "[r]esource limitations associated with modeling specific control measures during interim years before attainment dates."

This argument fails. First, that a state may not have the time, personnel, or resources to take advantage of an **option** is not a reason to relax the standard for the option.[41] If the state cannot demonstrate equivalent ozone reductions, for whatever reason–time, personnel, resources, or simple lack of scientific and technical support–then the state has not met the standard required for the option and cannot make use of it.

Second, even if there was merit in 1993 to the argument that photochemical grid modeling was too resource-intensive (and EPA's contemporaneous 1993 guidance on section 182(f) contradicts this) there no longer is any merit. In 1993, the cost of purchasing computer power equivalent to a 2010 Apple iPad 2 was approximately half a million U.S. dollars.[42] Furthermore, there is nothing whatsoever in the record for this action showing that the guidance justification, i.e. a lack of resources, applies to the District and the California Air Resources Board, a large and extremely experienced agency.

EPA may object that there would be additional effort in creating the emission inventory for each year to demonstrate equivalency, but EPA could reasonably allow for linear interpolation between the three-year milestones. In other words, photochemical grid modeling of the required annual VOC reductions and the substitute NOx reductions would only be necessary at the three-year intervals, for which states must already develop emission inventories to demonstrate RFP. If the substitute NOx reductions over the three-year interval achieved the same ozone reductions as 9% VOC reductions, then EPA could reasonably conclude that the NOx reductions would achieve equivalent ozone

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[41] In this respect, it must be noted that for every SIP submittal the state must demonstrate it has adequate personnel and resources to implement it. *See* 42. U.S.C. § 7410(a)(2)(E)(i). EPA determined that California does have adequate resources to implement the 2008 ozone NAAQS. 81 Fed. Reg. 18,766, 18,770 (Apr. 1, 2016). This applies equally to attainment plans such as the one here. *Id.* § 7502(c)(7) (requiring compliance with the applicable requirements of section 110(a)(2). This reinforces the point that if a state does not have the resources to take advantage of an option, then that option is no available. EPA may argue that it interprets the infrastructure requirements of section 110(a)(2) to not cover nonattainment SIPs. Even if this were a valid interpretation, which it is not, section 110(a)(2)(E)(i)would still require a state to have adequate resources to implement its whole air program. EPA makes no attempt to bifurcate air programs into nonattainment and attainment implementation when doing its analysis of section 110(a)(2)(E) submittals and so cannot now, retroactively, claim that it does.

[42] "The Cost of Computing Power Equal to an iPad2," The Hamilton Project, *available at* https://www.hamiltonproject.org/charts/cost_of_computing_power_equal_to_an_ipad2 (last visited 2/9/2020).

reductions to 3% VOC reduction on an annual basis. This conclusion could be bolstered by showing that the NOx reductions are generally linear on an annual basis.

Third, as discussed above EPA expects states to do sensitivity modeling for other optional interpollutant trading. And EPA in the same year, 1993, issued a guidance memorandum for section 182(f) recommending modeling of several scenarios in order to take advantage of the option to demonstrate that NOx sources should be relieved of obligations. It is arbitrary and capricious for EPA to inconsistently and without any explanation let states off the hook in this instance.

#### d. **EPA's Argument for Percentage Bases Is Without Merit**

As noted above, trading ratios for nonattainment NSR offsets are developed on a mass basis: for example, the demonstration may show that 10 tpd of NOx reductions are equivalent to 2 tpd of VOC reductions, resulting in a 5:1 ratio.

Here, the guidance states it uses a percentage basis to "avoid 'absurd' calculations."

> Substitution of NOx reductions for VOC on a ton for ton basis could yield calculated NOx reduction requirements which exceed the available NOx inventory in cases where the base VOC inventory greatly exceeds the NOx inventory. To illustrate, a 50% VOC reduction is analogous to a 100% NOx reduction assuming the VOC inventory is twice the NOx inventory and substitution is based on mass rather than percentage equivalency.[43]

First, there is nothing 'absurd' about an *optional* compliance method not being available when the facts demonstrate the option is not warranted. Second, the potential for this supposed absurdity only exists due to EPA's illegitimate procedure. In the illustration given, the area may be NOx limited or NOx saturated; photochemical grid modeling is necessary to determine what if any, NOx substitute reductions can be allowed.

Finally, the guidance states that the percentage basis is consistent with the percentage reduction requirement. However, one does not ordinarily add two percentages to arrive at an overall percentage. For example, if one's portfolio consists of stocks and bonds, and the stocks return 6% and the bonds return 3%, the portfolio does not return 9%. Instead, one must use weighted averages to determine the overall return. EPA must explain why this particular addition of percentages is legitimate.

### 3. ***The Legal Arguments in the Guidance Are Without Merit***

One would ordinarily expect EPA guidance on a technical demonstration to require little to no legal justification, and the relatively straightforward language of section 182(c)(2)(C) should create no exception. That EPA felt compelled to provide a legal justification at all is an indication that the guidance is problematic.

In particular, Section 4 of the guidance purports to give a "legal rationale underlying the interpretation of 'equivalency' and the linkage between the RFP and NOx substitution provisions within the Act."[44]

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[43] NOx Substitution Guidance at 4.
[44] NOx Substitution Guidance at 7.

However, it immediately gets off on the wrong foot:

> "Equivalency" is not defined strictly in the context of, "What specified level of NOx reductions, compared to VOC, results in equivalent ozone reductions." Instead, any combination of VOC and NOx reductions is "equivalent" so long as the reductions are consistent with those identified as necessary to attain the NAAQS in the modeling demonstration and provide for steady progress in leading to the emission reductions identified as necessary to attain the NAAQS by the specified attainment year.[45]

This argument fails at step 1 of the *Chevron* analysis. Congress cannot have possibly meant by "equivalent ozone reductions" anything other than "these NOx reductions result in the same ozone reductions as 3% per annum VOC reductions." The word "equivalent" is defined as "equal in value, measure, force, effect, significance, etc.," which precisely fits the mandated meaning just given.[46] The definition does not fit EPA's claim that "equivalent" can mean EPA can specify what level of NOx reductions are needed.

The guidance dodges this by stating "equivalent" is defined by consistency with the control strategy and attainment demonstration and provision for steady progress toward attainment. That is without merit. The requirement for a demonstration that the control strategy attains the standards is an entirely separate requirement from the 3% per annum VOC reductions; and for an area such as Coachella Valley the EPA interprets the Act such that the 3% per annum VOC reduction requirement **replaces** the general RFP requirement in section 172(c)(2) for steady progress towards attainment.[47] This must reflect Congress' considered judgement that for Serious areas (at least those that were previously Moderate), an attainment demonstration and general RFP have failed, and VOC reductions (or equivalent NOx reductions) must be mandated.

Next, the guidance states that section 182(c)(2)(C)

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[45] *Id.*

[46] In a 2005 action, EPA quotes a similar definition but fails to draw any conclusion, let alone the obvious one, from it. 70 FR at 25695 n. 12. In that action, EPA generally repeats the invalid policy and legal arguments from the NOx substitution memorandum, but also tosses in a claim that section 182(g), which allows EPA to waive a milestone demonstration for a milestone date that falls on the attainment date, somehow supports its interpretation. *Id.* at 26696. Unsurprisingly, that is also without merit: the reason for the waiver is that EPA must determine at the attainment date whether the area attained the standard. 42 U.S.C. § 7511(b)(2). If the area attained, RFP requirements are beside the point; if not new planning obligations apply.

[47] *See* "Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirement," 80 FR 12264, 12271 (Mar. 6, 2015) ("[W]e interpret the 15 percent VOC emission reduction requirement in CAA section 182(b)(1) such that an area that has already met the 15 percent requirement for VOC under either the 1-hour ozone NAAQS or the 1997 ozone NAAQS (for the first 6 years after the RFP baseline year for the prior ozone NAAQS) would not have to fulfill that requirement again. Instead, such areas would be treated like areas covered under CAA section 172(c)(2) if they are classified as Moderate for the 2008 ozone NAAQS, and would need to meet the RFP requirements under CAA section 182(c)(2)(B) if they are classified as Serious or above for the 2008 ozone NAAQS."). The Coachella Valley is an example of "such area," 84 FR at 2964, and is classified above Serious for the 2008 ozone NAAQS, *id.* at 2950.

> could be interpreted to mean that the amount of NOx reductions appropriate for substitution purposes is an amount, which, when compared to predicted VOC reductions, results in the same reductions in ozone concentrations that the VOC reductions would achieve in that area. However, such an interpretation could result in a demonstration showing that very small NOx reductions provide an adequate substitute for large VOC reductions. This is because under some conditions substantial VOC reductions produce only small–even insignificant–reductions in ozone concentrations. EPA believes Congress would not have intended States to meet the Act's progress requirements with emissions reductions that would produce only minimal improvement in ozone concentrations.[48]

These arguments are also without merit. First, the objection that a technically justified demonstration might allow very small NOx reductions to substitute for large VOC reductions applies with greater force to EPA's interpretation. Indeed, if against all odds EPA's recommended procedure did result in a technically legitimate substitution, then precisely the same thing would happen. But it could also happen under EPA's interpretation if a state gamed the NOx and VOC reductions used in the control strategy and attainment demonstration. Second, as shown above, Congress in the 1990 Amendments was well aware of the possibility that EPA claims Congress cannot have intended. Finally, EPA is talking out of both sides of its mouth: it cites consistency with the attainment demonstration as a basis for equivalency for its approach, but then claims the proper, technically justified approach is illegitimate because it might produce only minimal improvement in ozone concentrations. But demonstration of attainment is still required under the proper approach; thus the emission reductions in the control strategy under the proper approach ensure the necessary improvements in ozone concentrations. And EPA's approach does nothing to ensure equivalent ozone reductions.

Next, EPA notes that the second sentence of section 182(c)(2)(C), which states that EPA must "issue guidance concerning the conditions under which NOx control may be substituted for VOC control or may be combined with VOC control in order to maximize the reduction in ozone air pollution."[49] That guidance is not this guidance. EPA's NOx Substitution Guidance does nothing to set forth the technical circumstances regarding how to substitute or combine NOx controls "in order to maximize the reduction in ozone air pollution." Instead, it gives states a way to evade photochemical grid modeling that actually might show what the reductions in ozone concentrations would be. In particular, in a NOx-saturated situation, EPA's recommended procedure is actively harmful because it allows NOx reductions that are ineffective or even counter-productive to substitute for VOC reductions. . Thus, the next sentence, which allows for lesser levels of VOC reductions, is irrelevant because it only applies when a state follows EPA's nonexistent guidance.

Next, EPA states that section 182(c)(2)(C) "confers on the Agency the discretion to select, for purposes of equivalent reductions, a percentage of NOx emission reductions which is reasonably calculated to achieve both the ozone reduction and attainment

[48] Nox Substitution Guidance at 7.
[49] NOx Substitution Guidance at 7 (quoting 42 U.S.C. § 7511a(c)(2)(C).

progress goals intended by Congress."[50] Again, Congress specified VOC reductions **in addition to** the requirement for attainment and, under EPA's interpretation, for Serious and above areas **instead of** general RFP requirements.

EPA then states: "Nothing in the Act or in the legislative history directly addresses the case where NOx reductions that are substituted for VOC reductions, and which meet the plain grammatical meaning of 'equivalency,' nonetheless result in insignificant ozone reductions."[51] First, this is typical EPA misdirection: inventing a supposed gap in the statute despite clear statutory language. The plain meaning of "equivalent" addresses the case. Second, the legislative history shows Congress was fully aware of this possibility: Section 185B was enacted in the 1990 Amendments along with all the Part D, subpart 2 ozone requirements. Finally, EPA's purported concerns about "insignificant ozone reductions" appear to be crocodile tears: EPA's NOx substitution guidance gives states a way to evade assessing the ozone reductions from NOx substitution, and the same objection in any case applies to EPA's procedure. On the other hand, EPA appears to be entirely unconcerned about insignificant ozone reductions from NOx substitutions in a NOx-saturated situation. Finally, it must be asked: Suppose a state were to ignore EPA's recommendations and give a technically justified demonstration, using photochemical grid modeling, showing equivalency. Does EPA suppose it could disapprove that submission, due to the supposed potential for "insignificant ozone reductions"?

Finally, EPA states that the 3% per annum VOC reductions in section 182(c)(2)(B) is "additional evidence that Congress was concerned with getting more than minimal reductions in ozone concentrations through substitution."[52] However, if a proper equivalency demonstration, using photochemical grid modeling, shows that NOx substitutions are equivalent even though they result in minimal ozone reductions, then the 3% per annum VOC reductions also resulted in minimal ozone reductions, because the NOx substitute reductions must result in the same amount of ozone reduction as the 3% per annum VOC reductions.

### F. Summary

For these reasons, the policy and legal arguments in the NOx substitution guidance are without merit. And EPA's recommended procedure lacks any technical basis for demonstrating equivalency. EPA must disapprove the submittal with respect to the requirements of sections 182(c)(2)(B) and 182(c)(2)(C).

## II. EPA'S PROPOSED CONDITIONAL APPROVAL OF THE COACHELLA VALLEY CONTINGENCY MEASURES IS ARBITRARY AND CAPRICIOUS AND CONTRARY TO LAW

While paying lip service to the Ninth Circuit's holding in *Bahr v. U.S. EPA,*[53] that use of already implemented measures as contingency measures is a sham, EPA proposes to circumvent the decision by continuing to give credit to already implemented measures

[50] *Id.* at 8.
[51] *Id.*
[52] *Id.*
[53] *Bahr v. U.S. Environmental Protection Agency* ("*Bahr*"), 836 F.3d 1218 (9th Cir. 2016).

when assessing the adequacy of contingency measures. While EPA may think it has refined its reasoning for doing so compared to last month's flavor,[54] EPA's proposal relies on a factor Congress cannot have intended EPA to consider and is therefore arbitrary and capricious, contrary to law, and cannot be finalized. In addition, EPA's use of conditional approval is improper.

### A. EPA Must Be Continually Reminded Why Sham Contingency Measures Are Illegal

Yet again[55] inviting comment on the issue, EPA gives its discredited arguments for sham contingency measures:

> It has been the EPA's longstanding interpretation of section 172(c)(9) that states may rely on federal measures (e.g., federal mobile source measures based on the incremental turnover of the motor vehicle fleet each year) and local measures already scheduled for implementation that provide emissions reductions in excess of those needed to provide for RFP or expeditious attainment. The key is that the statute requires that contingency measures provide for additional emissions reductions that are not relied on for RFP or attainment and that are not included in the RFP or attainment demonstrations. The purpose of contingency measures is to provide continued emissions reductions while the plan is being revised to meet the missed milestone or attainment date.[56]

EPA then acknowledges the Ninth Circuit Court of Appeals' rejection of EPA's sham.[57] But EPA does not explain the reasoning of the *Bahr* court. Instead, EPA merely states that within the jurisdiction of the Ninth Circuit, states cannot use sham contingency measures. EPA must therefore be reminded why sham contingency measures are contrary to the Clean Air Act ("Act").

#### *1. The* Bahr *Opinion*

For convenience, the relevant portion of the *Bahr* opinion is provided here:

> The statutory language in § 7502(c)(9) is clear: it requires the SIP to provide for the implementation of measures "to be undertaken" in the future, triggered by the state's failure "to make reasonable further progress" or to attain the NAAQS. These measures are included in the SIP as "contingency measures" and are "to take effect" automatically in the future. Although the statute does not define the word "contingency," the meaning of the term is not ambiguous.

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[54] *See* 84 FR 70419 (Dec. 20, 2019) (proposing illegal approval of contingency measures based on the "SIP context" of NOx reductions from already implemented measures). It is remarkable–although EPA fails to remark on it–that less than one month later, still during the comment period for the December 20, 2019 proposal, EPA changes its rationale as well as declining to extend its freshly minted rationale to contingency measures for failure to attain by the applicable attainment date. This unexplained inconsistency is arbitrary and capricious. Furthermore, should EPA finalize both actions as proposed, the inconsistency would be grounds arising after in a challenge to the Ventura County action.

[55] *See* 84 FR at 70123

[56] 85 FR at 2969.

[57] *Id.* at 2968 (citing *Bahr*, 836 F.3d at 1235–37).

> According to the dictionary definition, it means "a possible future event or condition or an unforeseen occurrence that may necessitate special measures." Webster's Third New International Dictionary (2002). Because Congress was clear that "contingency measures" are control measures that will be implemented in the future, and the statutory language is not susceptible to multiple interpretations, we must give effect to its plain meaning. Chevron, 467 U.S. at 842–43, 104 S.Ct. 2778.[58]

To elaborate on the meaning of the term "contingency," note that for example a "contingency plan" is "a course of action to be followed *if a preferred plan fails* or an existing situation changes" or "a plan or procedure that will take effect if an emergency occurs; emergency plan."[59] If a nonattainment area fails to attain or make RFP, then the attainment plan (the "preferred plan") has failed.

And, in the case that there are already implemented measures the state did not rely on for attainment, RFP, or other Act requirement, the attainment plan has failed notwithstanding those already implemented measures. In other words, the already implemented measures failed as well. Simply put, Congress cannot have intended for nothing to happen when an attainment plan, even a plan relying on already implemented measures as contingency measures, fails.

Although the *Bahr* court did not discuss the policy implications, it should be noted that disallowing sham contingency measures does not discourage a state from early emission reductions. Early emission reductions can help ensure an area will attain by its attainment date; the consequences of failure to attain, such as higher offset ratios and new planning obligations, are serious in addition to the most serious consequence that the people, agriculture and native ecosystems continue to be exposed to dangerous and even deadly levels of air pollution. Thus, states retain a powerful incentive–much more powerful than potential use as a contingency measure–for early emission reductions. EPA's supposed policy justification is particularly wrong-headed when a state tries to rely on existing federal measures, such as those for mobile sources, as contingency measures. The state is not responsible for the emission reductions from federal measures, and to speak of the state's incentive to make those reductions is absurd.

Existing federal measures fail as contingency measures not only because they are existing and therefore not implemented in the future, but potentially for another reason as well. Sections 172(c)(9) and 182(c)(9) require the SIP to "provide for implementation of specific measures" as contingency measures.[60] Unless the state has adopted a state equivalent of a federal measure and submitted that equivalent measure for adoption in the SIP, the SIP does not "provide for implementation" of the federal measure.

In the case of mobile source standards, states are generally preempted from adopting standards, except in the case of a California waiver.[61] EPA's current actions to weaken mobile source standards and revoke California waivers demonstrate another problem

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[58] *Bahr*, 836 F.3d at 1235.
[59] RANDOM HOUSE DICTIONARY OF THE ENGLISH LANGUAGE 439 (2d. ed. unabridged, 1987) (emphasis added).
[60] 42 U.S.C. §§ 7502(c)(9), 7511a(c)(9).
[61] *Id.* § 7543.

with reliance on federal measures that are not approved into the SIP: the rug can be pulled out from under the contingency measures by unilateral EPA action that takes place outside the SIP process, in violation of the structure of the Act, and therefore without the state's consent.

#### 2. *The* LEAN *Opinion*

In *Louisiana Envtl. Action Network v. EPA,*[62] the Fifth Circuit Court of Appeals upheld EPA's interpretation of section 172(c)(9) as allowing for sham contingency measures. The opinion erred in three respects.

First, unlike the *Bahr* opinion, the *LEAN* opinion did not examine the plain meaning of "contingency," which confirms the plain meaning of "to take effect." Second, the opinion disregarded the plain meaning of "to take effect" by adopting EPA's theory that the statute was silent on whether "continuing" emission reductions could be used as contingency measures. This is a typical form of EPA misdirection: EPA attempts to avoid clear statutory language by inventing a statutory gap on some other issue. That is simply not how statutory interpretation works: one must start with the statutory language, and if it resolves the issue that is the end of the matter.

Third, the opinion erred in its discussion of the policy implications. Even with sham contingency measures disallowed, states still have a powerful incentive for additional emission reductions: the threat of failure to attain, reclassification, and additional planning obligations as well as the desire to provide the people and places of a state with clean, healthy air. States are not "penalized" for early emission reductions simply because those reductions don't qualify as contingency measures; those reductions don't count against the state in any way. On the other hand, public health and welfare is penalized by allowing for sham contingency measures.

Thus, the *LEAN* opinion offers no support for sham contingency measures. EPA must abandon its policy everywhere, not merely within the Ninth Circuit's jurisdiction.

### B. The District's Commitment Does Not Qualify for Conditional Approval

EPA proposes conditional approval based on a commitment by the District (and by CARB to adopt and submit) to revise certain approved rules:

> More specifically, the District has identified a list of 8 different rules that the District is reviewing for inclusion of potential contingency provisions. The rules and the types of revisions under review for contingency purposes include, among others: amending existing Rule 1110.2 ("Emissions from Gaseous- and Liquid- Fueled Engines") to remove exemptions for orchard wind machines powered by internal combustion engines and agricultural stationary engines; amending existing Rule 1134 ("Emissions of Oxides of Nitrogen from Stationary Gas Turbines") to require more stringent NOx limits for outer continental shelf turbines and produced gas turbines and/or remove or limit the exemptions for near-limit and low-use turbines; and adopting new Rule

[62] "LEAN," 382 F.3d 575, 580 (5th Cir. 2004).

> 1150.3 ("NOx Reductions from Combustion Equipment at Landfills") to require more stringent NOx limits through use of gas clean-up or other technologies.

First, this description is inaccurate with respect to Rule 1110.2. The commitment is only to "remove or limit," not "remove" the exemptions.[63]

The commitment is similar in this respect for all eight rules:

- Further amend Rule 1110.2 - Emissions from Gaseous-and-Liquid-Fueled Engines to *remove or limit exemptions* for orchard wind machines powered by internal combustion engines and agricultural stationary engines;
- Further amend Rule 1134 - Emissions of Oxides of Nitrogen from Stationary Gas Turbines to *require more stringent NOx limits* for outer continental shelf turbines and produced gas turbines; and/or *remove or limit the exemptions* for near-limit and low-use turbines;
- Further amend Rule 1135 - Emissions of Oxides of Nitrogen from Electricity Generating Facilities to *remove or limit the exemptions* for near-limit and low-use electric generating units;
- Adopt Rule 1147 series (e.g., 1147.1, etc.) - NOx Reductions from Miscellaneous Sources to include a *more stringent NOx limit requirement* in Rules 1147 or 1147.1 on a source category (e.g., ovens, dryers, heaters), which would otherwise be required to comply with a higher NOx limit;
- Adopt Rule 1150.3 - NOx Reductions from Combustion Equipment at Landfills to require *more stringent NOx limits* through use of gas clean-up or other technologies;
- Adopt Rule 1179.1 - NOx Reductions from Combustion Equipment at Publicly Owned Treatment Works to require *more stringent NOx limits* through use of gas clean-up or other technologies;
- Adopt an Indirect Source Rule for New Development or Redevelopment Projects that would *require mitigation of NOx emissions*;
- Adopt an Indirect Source Rule for Warehouses to include the *removal or limitation of an exemption* (e.g., locations with small number of trucks) to require mitigation of NOx emissions;[64]

As a result, the commitment does not contain any "specific enforceable measures" within the meaning of section 110(k)(4). Section 110(k)(4) provides:

> The Administrator may approve a plan revision based on a commitment of the State to adopt *specific enforceable measures* by a date certain, but not later than 1 year after the date of approval of the plan revision.[65]

A commitment to revise existing emission limitations in vague, unspecified ways ("limiting exemptions" or making the emission limitation "more stringent") is not a specific measure. Identifying eight rules to revise is no more specific than just a general

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[63] August 2, 2019 Letter from Wayne Nastri, Executive Director, South Coast Air Quality Management District, to Richard Corey, Executive Officer, California Air Resources Board, Docket No. EPA-R09-OAR-2019-0241-0060, at 2.
[64] *Id.*
[65] 42 U.S.C. § 7410(k)(4) (emphasis added).

commitment to revise the SIP to comply with Act, an approach that was twice rejected by the D.C. Circuit Court of Appeals.[66] As explained by the Court in *Sierra Club*:

> [A]s we explained in NRDC, the purpose of the conditional approval provision is not to permit states more time to identify control measures, but rather to give EPA the opportunity to determine whether a SIP, "although not approvable in its present form, can be made so by adopting specific EPA-required changes within the prescribed conditional period." *NRDC*, 22 F.3d at 1134 (emphasis added). As we further explained, "[s]uch a determination cannot reasonably be made unless the conditionally approved submittal contains something more than a mere promise to take appropriate but unidentified measures in the future." *Id*. And that requires that the States complete the analyses necessary to identify appropriate measures before, rather than after, conditional approval is granted.[67]

The same applies here. EPA may attempt to respond that under its contingency measure theory, token de minimis contingency measures can be approved so long as other already implemented measures take up the slack, making EPA able to determine that the promised measures would address the deficiency. That would simply underscore, though, how the rot from EPA's well-nigh frivolous contingency measure theory[68] has infected EPA's use of conditional approval.

The *NRDC* court also noted a structural reason for its holding: EPA's completeness determination under section 110(k)(1) "cannot reasonably be made unless the conditionally approved submittal contains something more than a mere promise to take appropriate but unidentified measures in the future."[69] Under EPA's rules for completeness determinations, a SIP submittal must contain:

> Quantification of the changes in plan allowable emissions from the affected sources; estimates of changes in current actual emissions from affected sources or, where appropriate, quantification of changes in actual emissions from affected sources through calculations of the differences between certain baseline levels and allowable emissions anticipated as a result of the revision.[70]

Here EPA frankly admits that due to the non-specific nature of the promised revisions, the emission reductions from them have not been quantified.[71] In addition to rendering EPA's proposed conditional approval arbitrary and capricious,[72], this deficiency renders the submittal incomplete, thus showing that EPA's proposed conditional approval is nothing more than a "means of circumventing" statutory deadlines for SIP submittals and EPA action.[73]

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[66] *NRDC v. EPA*, 22 F.3d 1125 (D.C. Cir. 1994); *Sierra Club v. EPA*, 356 F.3d 296 (D.C. Cir. 2003).
[67] *Sierra Club*, 356 F.3d at 303.
[68] *See infra*, section II.C.
[69] *NRDC*, 22 F.3d at 1134.
[70] 40 C.F.R. part 51, Appendix V, § 2.2(c).
[71] 85 FR at 2969.
[72] *See infra*, section I.C.
[73] *NRDC*, 22 F.3d at 1134-35.

Furthermore, because the actual language of the promised revised rules is not provided in the commitment letter, there is no way for EPA to determine that the rules as revised will be enforceable, as required by section 110(k)(4). The "more stringent NOx limits" might lack adequate associated monitoring, recordkeeping, and reporting.[74] Or they may include director discretion language that interferes with enforceability,[75] or may be unclear as to averaging times, and so on.[76]. Similar concerns apply to the revised exemptions.

Finally, conditional approval is a discretionary action: EPA "may" approve the submittal based on the commitment. EPA in its proposal has completely failed to articulate any rationale for **why** EPA would exercise its discretion to conditionally approve the submittal. This is *per se* arbitrary and capricious and an abuse of discretion (as well as a failure of notice).

Significantly, in a guidance memorandum issued by EPA regarding (among other things) conditional approval, EPA recommends several factors to assess when deciding whether to conditionally approve a submittal:

> Because the conditional approval relies on a commitment from the State, EPA would need some level of confidence that the State would be able to meet such a commitment. In making a determination as to whether a State could reasonably be expected to meet its commitment, EPA would need to consider a number of factors such as:
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> – the amount of technical work necessary for the measures to be adopted;
> – whether adoption of the measures is expected to be controversial;
> – the average length of the State adoption process;
> – how far along in the process the State is; and
> – the State's past track record.
>
> It should be noted that these are only some of the factors that should be considered. Each Region, in making a determination regarding the credibility of the State's commitment, may have to look at a number of other factors. The Region should clearly explain, either in the NPR or in a technical support document, the rationale for these determinations.[77]

The proposal notice entirely ignores these factors. This unexplained failure is *per se* arbitrary and capricious. It is also a failure of notice: not only does EPA fail to discuss this relevant guidance, EPA does not provide it in the docket or even list it as a relevant document.

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[74] *See* 40 C.F.R. §§ 51.210, .211 (requiring the SIP to include provisions for monitoring the status of compliance and for recordkeeping and reporting as necessary to determine compliance).
[75] 80 FR 33840, 33929 (June 12, 2015).
[76] *See generally* Memorandum from Michael S. Alushin, Alan W. Eckert, and John S. Seitz, "Review of State Implementation Plans and Revisions for Enforceability and Legal Sufficiency" (Sept. 23, 1987). This memorandum may be found in "SIP Guidance Notebook 1," *available at* https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=91021VWH.TXT.
[77] Memorandum from John Calcagni, Director, Air Quality Management Division to Regional Air Directors, "Processing of State Implementation Plan (SIP) Submittals" at 6 (July 21, 1992), *available at* https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2_old/19920721_calcagni_sip_submittal_processing.pdf.

### C. EPA's Proposed Conditional Approval of the Coachella Valley Contingency Measures Threatens to Make a Mockery of the *Bahr* Decision

EPA notes that, under sections 172(c)(9) and 182(c)(9), contingency measures can be triggered either by failure to attain by the applicable attainment date or failure to make reasonable further progress ("RFP"); EPA states that for purposes of the proposal EPA is splitting the two scenarios.

Under EPA's longstanding policy, contingency measures should approximately equal one year of RFP. This policy is well grounded in the statute. However, EPA admits that the promised contingency measures here will "likely" not equal one year of RFP. Nonetheless, EPA proposes to conditionally approve the promised measures with respect to the failure to make RFP scenario. The sole reason EPA gives is surplus NOx reductions from already implemented measures.[78] Under the *Bahr* decision, such reductions cannot qualify as contingency measures, but EPA proposes to functionally treat them as such by claiming they are relevant to the adequacy of the promised contingency measures. This disregard for the *Bahr* decision threatens to make a mockery of it by allowing approval of de minimis real contingency measures so long as sham contingency measures exist but are not submitted as such.

#### *1. Because the Submission Does Not Quantify the Reduction from the Promised Contingency Measures, the Reductions Must Be Presumed To Be Insignificant*

As EPA admits, the District did not quantify the emission reductions from the promised contingency measures due to their lack of specificity:

> In this instance, because of the nature of the District's intended contingency measure (i.e., to modify an existing rule or rules to increase the stringency or to remove[79] an exemption), the District did not quantify the potential additional emission reductions from its contingency measure commitment, but we believe that it is unlikely that the RFP and attainment contingency measures, once adopted and submitted, will in themselves achieve one year's worth of RFP (i.e., 0.5 tpd of VOC or 0.9 tpd of NOX) given the types of rule revisions under consideration and the magnitude of emissions reductions constituting one year's worth of RFP.[80]

In the absence of quantification of the emission reductions (and associated technical basis), or even some sort of qualitative assessment, for purposes of both public notice and assessment of the adequacy of the promised contingency measures, the emission

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[78] The notion of "surplus" NOx emission reductions is absurd as a factual matter when one considers that the 4th highest eight hour daily maximum ozone value in Riverside County was still 96 parts per billion in 2019. *See* https://www.epa.gov/outdoor-air-quality-data/monitor-values-report. And without photochemical grid modeling, NOx reductions for contingency measures are of questionable value. *See supra*, section I.

[79] As noted above, *see supra* section I.B, this is inaccurate: the commitment (such as it is) is to "limit or remove" exemptions.

[80] 85 FR at 2969.

reductions must be presumed to be de minimis, or in other words, insignificant.[81] As a result, EPA's belief that it is "unlikely" the promised contingency measures will equal one year of RFP is at best an understatement. There is simply no basis whatsoever in the record to think that the emission reductions from promised measures equal one year of RFP, or for that matter any other reasonable standard for judging contingency measures. For purposes of this action, the emission reductions must be presumed to be insignificant.

### 2. *Early Emission Reductions Are Not Relevant to the Adequacy of Contingency Measures*

Although there is no basis whatsoever in the record to find that the promised contingency measures are adequate to meet one year of RFP–or for that matter to meet any reasonable standard for judging contingency measures–EPA nonetheless proposes to conditionally approve them:

> However, the 2018 SIP Update provides the larger SIP planning context in which to judge the adequacy of the to-be-submitted District contingency measure by calculating the surplus emissions reductions estimated to be achieved in the RFP milestone years and the attainment year. Table VII–2 in the 2018 SIP Update identifies estimates of surplus NOx reductions in the Coachella Valley for each RFP milestone year. These estimates range from 33.9 percent in milestone year 2017 to 42.9 percent in milestone year 2023.128 These values far eclipse one year's worth of RFP (i.e., 3 percent, approximately 0.5 tpd of VOC or 0.9 tpd NOx) and provide the basis to conclude that the risk of any failure to achieve an RFP milestone for the 2008 ozone NAAQS in the Coachella Valley is very low. The surplus reflects already implemented regulations and is primarily the result of vehicle turnover, which refers to the ongoing replacement by individuals, companies, and government agencies of older, more polluting vehicles and engines with newer vehicles and engines designed to meet more stringent CARB mobile source emission standards. In light of the extent of surplus NOx emissions reductions in the RFP milestone years, the emissions reductions from the District contingency measure would be sufficient to meet the contingency measure requirements of the CAA with respect to RFP milestones, even though the measure would likely achieve emissions reductions lower than the EPA normally recommends for reductions from such a measure.

This is functionally no different than simply approving the already implemented regulations as contingency measures, in violation of *Bahr*.[82] EPA is stating that it's acceptable to approve the promised contingency measures because other, already implemented regulations lower the risk of the contingency measures being triggered, even if the promised contingency measures achieve only de minimis emission

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[81] If EPA or the District produces an analysis of the emission reductions from the promised contingency measures as support for the conditional approval, then EPA must re-propose its action.

[82] Technically, EPA's proposal is even worse than a simple violation of *Bahr*: the already implemented regulations would not even need to be approved into the SIP. *Cf. supra*, section II.A.1 (noting issue with federal measures not approved in the SIP).

reductions. In other words, EPA thinks that states can circumvent *Bahr* by including legitimate but token de minimis contingency measures in the plan and still rely in large part on already implemented measures that are illegal as contingency measures under *Bahr*. Thus, EPA arbitrarily and capriciously proposes to "rel[y] on [a] factor[] which Congress has not intended it to consider,"[83], namely the risk of the contingency measure being triggered.

That under EPA's risk theory EPA can approve contingency measures that are functionally equivalent to illegal sham measures (except, perhaps, for an insignificant de minimis amount) is sufficient to prove the theory invalid. The theory falls for other reasons, too. Contingency measures only take effect if triggered by failure to attain by the applicable attainment date or (relevant here) failure to make RFP. When the trigger happens, the probability of it happening is now 100%. The previous probability of the triggering scenario is irrelevant. The adequacy of contingency measures must be judged by how well they address the failure scenario, not how likely that scenario is. EPA's longstanding interpretation that contingency measures should equal one year of RFP is in accord with this: the reason for the one year of RFP is to achieve continued emission reductions while the state revises its SIP to address the failure.[84]

To illustrate the point, consider purchasing life insurance. The amount of insurance should be determined based on what financial shortfalls may happen in the scenario that the insured dies, regardless of how likely that scenario is. Thus, the insurance should cover loss of income, potential estate taxes, impacts on owned businesses, and so on. Risk of death is irrelevant as to the amount.[85]

Furthermore, it was Congress' considered judgment in the 1990 Amendments, based on years of failure by states and EPA to attain or even make progress towards attaining the standards, that failure to attain and to make RFP were sufficiently probable that contingency measures needed to be adopted. EPA cannot negate that judgment through its own assessment of risk. Thus, the existence of contingency measures shows that risk cannot be a factor on which EPA can rely.

This continued disregard for *Bahr* cannot stand. EPA needs to move on from the denial stage and accept the truth: EPA's longstanding policy on contingency measures is, and always was, nothing more than an illegal gimmick to let states off the hook for their responsibilities under the Act. EPA's risk theory is a transparent *de facto* continuation of that gimmick.

### 3. *Contingency Measures Should at a Minimum Equal One Year of RFP*

EPA states:

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[83] *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983).
[84] *See infra*, section II.C.3.
[85] *See, e.g.*, Larry Light, "How Much Life Insurance Do I Need," Forbes.com, April 29, 2013, *available at* https://www.forbes.com/sites/lawrencelight/2013/04/29/how-much-life-insurance-do-i-need/#39c7886d6c3c. (last visited 2/9/20). It should be noted that at the end this article mentions risk of death for seniors, but the overriding consideration for seniors is the ability to self-insure.

> Neither the CAA nor the EPA's implementing regulations for the ozone NAAQS establish a specific amount of emissions reductions that implementation of contingency measures must achieve, but we generally expect that contingency measures should provide for emissions reductions approximately equivalent to one year's worth of RFP, which, for ozone, amounts to reductions of 3 percent of the baseline emissions inventory for the nonattainment area. For the 2008 ozone NAAQS in the Coachella Valley, one year's worth of RFP is approximately 0.5 tpd of VOC or 0.9 tpd of NOx reductions.

While the relevant contingency measure provisions of the Act, sections 172(c)(9) and 182(c)(9), may not explicitly state the amount of emission reductions, EPA's policy regarding one year of RFP is well-grounded in the Act. First, as explained by EPA, this ensures emission reductions in the interim period while the state prepares a new submission:

> [C]ontingency measures should represent 1-year's worth of progress, amounting to reductions of 3 percent of the baseline emissions inventory for the nonattainment area, *which would be achieved while the state is revising its plans for the area.*[86]

In particular, when an area fails to reach a milestone and has therefore failed to make RFP, under section 182(g)(3) the state must elect to either: 1) have the area reclassified; 2) rely on the approved contingency measures; or 3) adopt an economic incentive program. If EPA determines that the approved contingency measures are inadequate to meet the next milestone, then the state has one year to submit a revision to do so. Thus, the one year of RFP has structural support in the Act.

Second, the plain meaning of "contingency" supports EPA's reasoning that contingency measures should provide sufficient emission reductions while the state is revising its SIP. A "contingency fund" consists of "money or securities set aside to *cover* unexpected conditions or losses."[87] If one has a contingency fund to cover potential loss of one's job, then one expects the contingency fund to be large enough to cover expenses until a new job can be found. While it may not be possible to estimate precisely how long finding a new job will take and what the expenses may be in the interim, a de minimis amount will certainly not be enough. Similarly, while it may not be possible to estimate precisely how long a state will take to revise its SIP, a de minimis amount of emission reductions will certainly not be enough to cover air pollution issues in the interim period.

### D. Summary

The District's commitment does not satisfy the requirements of section 110(k)(4); EPA's proposed conditional approval is arbitrary and capricious, contrary to law, and an abuse of discretion. Emission reductions from the promised contingency measures have not, and cannot be quantified, or even assessed qualitatively. There is therefore no basis whatsoever to find them adequate, under EPA's reasonable standard of 1-year of RFP or any other reasonable standard. EPA's proposal to find them adequate due to other,

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[86] 80 FR at 12285 (emphasis added).

[87] RANDOM HOUSE DICTIONARY OF THE ENGLISH LANGUAGE 439 (2d. ed. unabridged, 1987) (emphasis added).

existing emission reductions amounts to using the other reductions as a sham contingency measure, in disregard of the *Bahr* decision. For these reasons, EPA must disapprove the submitted contingency measures.

## III. CONCLUSION

EPA's proposed approval for RFP requirements appears to rely on the recommendations in an antiquated and unscientific memorandum. Continued reliance on it twenty-seven years later is arbitrary and capricious and contrary to law. EPA's proposed use of conditional approval is improper; the submittal does not meet the requirements of section 110(k)(4). And EPA cannot continue its attempts to circumvent the *Bahr* decision. EPA must disapprove the submittal for RFP and contingency measure requirements.

Respectfully,

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