

SUBMITTED VIA REGULATIONS.GOV AND EMAIL

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RE: Air Plan Approval; Colorado; Serious Attainment Plan Elements and Related Revisions for the 2008 8-Hour Ozone Standard for the Denver Metro/North Front Range Nonattainment Area (Docket No. EPA-R08-OAR-2022-0632)

Dear Ms. Fulton:

On behalf of the Center for Biological Diversity, 350 Colorado, the Colorado Chapter of the Sierra Club, the National Parks Conservation Association, Earthworks, and their tens of thousands of members and supporters who are harmed by ozone pollution in and from the Denver Metro/North Front Range 2008 ozone nonattainment area, we are writing to urge you to disapprove Colorado's 2008 ozone national ambient air quality standard (NAAQS) serious nonattainment state implementation plan (SIP) and some of the related provisions. EPA has already determined that this plan has failed to do what it was designed to do, that is bring the Denver Metro/North Front Range area into compliance with the 2008 ozone NAAQS by the deadline EPA set for serious nonattainment areas. Tragically, because ozone kills people and causes a host of other adverse outcomes, EPA's proposed approval forces us to have to say what should be readily apparent: the government cannot approve plans that it already knows have failed. After disapproving this SIP submittal, EPA should quickly promulgate a FIP which will actually end the scourge of high levels of ground-level ozone in the Denver Metro/North Front Range area.

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I. INTRODUCTION AND BACKGROUND¹

A. Meaningful Emissions Reductions from Colorado Sources Would Go a Long Way Toward Mitigating the Serious Public Health and Welfare Impacts Caused by Ozone in the Denver Metro/North Front Range Area.

People in the Denver Metro/North Front Range (Front Range) are consistently exposed to some of the highest ozone levels in the United States outside of California. Indeed, the Front Range has not timely complied with any of EPA's NAAQS for ozone pollution, and the area far exceeds the ozone levels current scientific research dictates as necessary to protect human health—especially for sensitive populations such as children, asthmatics, and the elderly. In fact, the Front Range consistently ranks as one of the most polluted areas in the country for ozone.² EPA has recently downgraded the Front Range's classification for the 2008 ozone NAAQS to severe, which demonstrates that the Serious state implementation plan EPA is proposing to approve is a failure. EPA has also recently downgraded the Front Range's classification for the 2015 ozone NAAQS to moderate, and Colorado has admitted that the Front Range will not come into compliance with the 2015 ozone NAAQS by its moderate attainment date. However, EPA can change all of this, and the first step is to disapprove the 2008 ozone NAAQS serious SIP.

Recent epidemiological studies demonstrate that modest reductions in ozone in the Front Range would save millions in avoided medical costs and mortalities. The Commenters' suggested reductions in pollution from fossil-fuel burning power plants and oil and methane gas extraction would also result in significant reduction in harmful greenhouse gas, sulfur dioxide ("SO₂"), nitrogen oxides ("NO_x"), and particulate matter 2.5 ("PM_{2.5}") emissions. PM_{2.5} reductions are particularly important because of its deadly nature. In addition, it is likely EPA will create a new and more protective PM_{2.5} NAAQS that the Front Range will violate unless EPA acts now to disapprove the serious ozone SIP and promulgate a federal implementation plan with meaningful emissions reduction measures.

Scientific research continues to strengthen our understanding of the harm that ozone causes to public health. Exposure to ozone is connected to a wide range of significant human health impacts including respiratory and cardiovascular morbidity, and premature mortality, and central nervous system and developmental impacts have been demonstrated through controlled human exposure, epidemiologic, and toxicological studies.³ These include demonstrated respiratory and cardiovascular morbidity, premature mortality, and perinatal and reproductive impacts, along with other suggested impacts such as to the central nervous system. The physiological impacts of ozone exposure are experienced even by healthy individuals and even at relatively low concentrations of ozone. Moreover, there is a growing body of scientific evidence showing that repeated exposure over time causes additional health impacts, which may be more severe and less likely to be reversible.

¹ Headings are solely for the convenience of the reader and in no way limit the scope of the comments.

² See <http://www.lung.org/our-initiatives/healthy-air/sota/city-rankings/most-polluted-cities.html>.

³ See, e.g., U.S. Environmental Protection Agency, Integrated Science Assessment for Ozone and Related Photochemical Oxidants (Final Report) EPA/600/R-10/076F (2013), <http://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=247492> [hereinafter, "ISA (2013)"].

Research on the relationship between ozone exposure and respiratory effects is well documented. Epidemiologic studies have demonstrated consistently that increasing concentrations of ozone are associated with decreased lung function, increases in respiratory distress symptoms, pulmonary inflammation in children with asthma, increases in respiratory-related hospital admissions and emergency department visits; and increases in respiratory mortality.

Ozone exposure has also been linked to the exacerbation of asthma, as well as development of the disease. For individuals already diagnosed with asthma, evidence shows that ozone exposure increases the likelihood of having an asthma attack.⁴ Ozone exposure has been shown to have especially significant effects on asthma exacerbation among children. Children living in areas with higher ambient ozone concentrations have been shown to be more likely to either have asthma or to experience asthma attacks compared with children living in areas having lower ambient ozone concentrations.⁵

Evidence also shows positive associations between long-term exposures to ozone and new-onset asthma. For adults, studies show increased risks for developing asthma per 10 parts per billion (ppb) increase in annual mean ozone or 8-hour average.⁶

Ozone exposure is most often linked to adverse respiratory effects, but is also associated with adverse cardiovascular effects through an increasing body of research. Ozone exposures are shown to increase risks of hospitalization for acute myocardial infarction, coronary atherosclerosis, stroke, and heart disease, even at ambient ozone levels well-below current NAAQS.⁷ New research also shows that chronic ozone exposure may put children at risk for cardiovascular disease later in life.⁸

⁴ See, e.g., Franze et al., Protein nitration by polluted air, *Enviro Sci Technol.* 39: 1673-1678 (2005), <http://dx.doi.org/10.1021/es0488737>; U.S. Environmental Protection Agency, Air quality criteria for ozone and related photochemical oxidants [EPA Report], (EPA/600/R-05/004AF) (2006), <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=149923>; see also Ex. 20.

⁵ Akinbami, The association between childhood asthma prevalence and monitored air pollutants in metropolitan areas, United States 2001-2004 (*Environ Res. Apr.* 2010), 110(3):294-301, <http://dx.doi.org/10.1016/j.envres.2010.01.001>.

⁶ McDonnell et al., Long-term ambient ozone concentration and the incidence of asthma in nonsmoking adults: the Ahsmog study, *Environ Res* 80: 110-121 (1999), <http://www.ncbi.nlm.nih.gov/pubmed/10092402>; Greer et al., Asthma related to occupational and ambient air pollutants in nonsmokers., *J Occup. Environ Med* 35: 909-915 (1993), <http://www.ncbi.nlm.nih.gov/pubmed/8229343>.

⁷ See ISA (2013) at 6-196 to 6-201.

⁸ Breton et al., Childhood air pollutant exposure and carotid artery intima-media thickness in young adults, *Circulation*, 126:1614-1620 (2012), <http://www.ncbi.nlm.nih.gov/pubmed/22896588>; Adar, Childhood exposures to ozone: the fast track to cardiovascular disease?, *Circulation*, Sep 25;126(13):1570-2 (2012), <http://www.ncbi.nlm.nih.gov/pubmed/23008468>.

Epidemiological and toxicological studies also show a strong relationship between short-term ozone exposures and premature mortality.⁹ The ISA describes how numerous studies across the U.S., Canada, and Europe — including multi-city, multi-continent and single city studies — demonstrate positive links between ambient ozone concentrations and respiratory-related mortality. Across communities, a 10 ppb increase in the prior week’s ozone level was associated with a 0.52% increase in mortality.

Additionally, certain “sensitive” groups and individuals are found to have significantly greater susceptibility to ozone-related health impacts. In a 14-year study of 95 U.S. cities, links were found between short-term increases in ozone and premature mortality, even when excluding days exceeding 60 ppb, finding that that “daily changes in ambient O₃ exposure are linked to premature mortality, even at very low pollution levels.”¹⁰ Other health impacts linked to ozone exposure are related to newborns and the developing fetus.¹¹ Prenatal exposure to ozone has been linked to reduced birth weight, premature delivery, and birth defects.¹²

Ozone is also harmful to vegetation and ecosystems.¹³ Ozone can be especially harmful to sensitive vegetation—including trees such as the black cherry, quaking aspen, white pine, and ponderosa pine—during the growing season.¹⁴ Ozone pollution can also indirectly harm soils, water, and wildlife, and their associated ecosystems, leading to diminished clean air and water.¹⁵

Finally, ozone pollution contributes to the climate crisis. Ozone is a greenhouse gas and ozone pollution hinders plant growth throughout a plant’s lifecycle, thereby shrinking the carbon sequestration potential of plants.¹⁶

The Colorado Air Pollution Control Division and Air Quality Control Commission [hereinafter, collectively “Division”] have failed to include emission reductions needed to reduce

⁹ See generally ISA (2013) and U.S. Environmental Protection Agency, Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards, Second External Review Draft (2013) [hereinafter, “Policy Assessment (2014)”]. Both conclude that there is a likely causal relationship between short-term ozone increases and total mortality.

¹⁰ Bell et al., The Exposure-Response Curve for Ozone and Risk of Mortality and Adequacy of Current Ozone Regulations, *Environ Health Perspect.* 114:532-536 (2006), available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1440776/>.

¹¹ ISA (2013) at 2-20.

¹² Salam et al., Birth Outcomes and Prenatal Exposure to Ozone, Carbon Monoxide, and Particulate Matter: Results from the Children’s Health Study, *Environ Health Perspec.* 113: 1638-1644 (2005), <http://dx.doi.org/10.1289/ehp.8111>.

¹³ EPA, *Ecosystem Effects of Ozone Pollution*, (last updated Mar. 8, 2022) <https://www.epa.gov/ground-level-ozone-pollution/ecosystem-effects-ozone-pollution>.

¹⁴ *Id.*, see also EPA, *Integrated Assessment for Ozone and Related Photochemical Oxidants* EPA/600/R-20/012 (Apr. 2020) at 8-42, <https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=348522>.

¹⁵ 73 Fed. Reg. 16436, 16485-86.

¹⁶ *Id.* at 16486; see generally UC Davis, *Biological Carbon Sequestration*, <https://climatechange.ucdavis.edu/climate/definitions/carbon-sequestration/biological>.

ambient ozone levels to below the 2008 ozone NAAQS which could include curtailing oil and gas operations and setting hourly mass-based emission limits on fossil fuel burning power plants during the high ozone season even though they would clearly advance attainment. EPA's proposal makes the same error, and instead of meaningfully evaluating reasonable and available emission reduction measures, proposes to conclude that no additional measures are available because the attainment year has already passed. This arbitrary and absurd rationale effectively rewards states that fail to timely submit SIPs as well as EPA's illegal delays in making attainment determinations and taking final actions on SIP submittals, and undermines the core purposes of the Clean Air Act.

B. EPA Should Propose a FIP Right Away that Prohibits Oil and Gas Operations During Smog Season, Sets Hourly Limits on Fossil Fuel-Burning Power Plants, Requires All Pneumatic Controllers to be Non-Emitting, Requires Vapor Recovery Units Rather than Flares to Control Storage Tanks, and Contains Additional Measures to Actually Meet the 2008 Ozone NAAQS.

As detailed below, the law requires that EPA disapprove almost all of the elements of the 2008 ozone Serious SIP. While the Division submits inadequate SIPs to buy more time,¹⁷ EPA cannot approve a SIP that it knows it is illegal. That would lead to death and disease of people, plants, and wildlife in the Front Range in violation of people's civil rights.

Thus, after EPA disapproves the 2008 ozone Serious SIP, EPA should quickly promulgate a federal implementation plan (FIP) to actually bring the Front Range into compliance with the 2008 ozone NAAQS. The Supreme Court has held that EPA is allowed to promulgate a FIP immediately after disapproving a SIP. *EPA v. EME Homer City Generation, L.P.*, 134 S.Ct. 1584, 1598, 1600-1601 (2014) ("But EPA is not obliged to wait two years or postpone its action even a single day: The Act empowers the Agency to promulgate a FIP "at any time" within the two-year limit."). Because this is a life or death matter, and because EPA and the Division have consistently failed to fix the ozone problem for a decade and a half, EPA should act quickly and decisively with a FIP to bring ozone down to below the 2008 ozone NAAQS.

There are numerous measures that EPA could put in a FIP to accomplish this goal. EPA could label these measures as contingency measures, reasonably available control technology (RACT), and/or reasonably available control measures (RACM) in a FIP. Some of the Commentors have shared these potential measures with EPA and the Division in conversations or written comments. The Division has consistently offered unsubstantiated excuses against these measures.

EPA should include a requirement in its FIP which prohibits certain upstream oil and gas extraction activities from June 1 to September 30 each year. We selected these dates by reviewing the 2021 monitoring data for the Chatfield Park monitor, which had the highest design

¹⁷ See <https://www.cpr.org/2022/11/17/colorado-air-pollution-data-error/> ("Mike Silverstein, the director of the Regional Air Quality Council, has said there's no chance the Front Range will meet the deadline and that submitting the inadequate plan is a strategy to buy more time.")

value, 81 ppb, for the attainment period for this serious ozone SIP, that is 2018 to 2020. The prohibited activities should include, but not necessarily be limited to, drilling, fracking, well completion, liquids unloading, blowdowns, and condensate, oil, and produced water loadout. If these measures require temporarily shutting in some wells operating in a severe ozone nonattainment area, that is a completely reasonable consequence. Colorado asks people to curtail various activities during high ozone periods such as driving their cars, fueling their cars, mowing their lawns. Given the contribution of ozone precursor pollutants from the oil and gas industry, timely reductions from that sector's emissions are needed to address NAAQS violations and bring the area into attainment. Oil and methane gas are global commodities so some delay in oil and gas production will have no measurable impact on consumers.

Another measure EPA should include in the FIP is hourly NOx emission limits for fossil fuel burning power plant in or near the nonattainment area. This should include an hourly limit of 1 ppm of NOx for combined cycle methane gas plants. This limit has been required on numerous power plants in California for many years. The limit must be based on an hourly averaging time to be effective. If EPA uses a 24-hour averaging time, for example, the power plants could put out more NOx during hours when the sun is shining and less after the sun sets.

This is the exact opposite of what we need to come into compliance with the ozone NAAQS. The reality is that it would be cheaper and cleaner if we moved to a renewable electric generation system in Colorado but Colorado lags behinds. Year to date in 2022, Utah has generated more electricity from solar PV than Colorado. Year to date in 2022, Oklahoma has generated well over twice as much electricity from wind power than Colorado.¹⁸ This is shameful and expensive for Coloradoans. Thus, to the extent strict hourly averaging time emission limits drive a quicker transition to renewable energy in Colorado, that would be a wonderful co-benefit.

The FIP should also require all pneumatic controllers in the nonattainment area at oil and gas well pads and tank batteries to be zero emission. Colorado has state only rules which require a high percentage of pneumatic controllers to eventually be zero emissions. Thus the technology is proven and is economically viable. Indeed, zero emission controllers increase oil and gas products available to market rather than waste by venting them into the ambient air people and wildlife breathe. Thus, EPA should include a FIP that requires all pneumatic controllers to be zero emission.

Similarly, vapor recovery units should be required in the FIP to control condensate, oil, and "produced water" storage tanks rather than flares which, even if operating properly, emit copious amounts of NOx in the aggregate. Again, these vapor recovery units are currently being used in Colorado and elsewhere demonstrating they are technologically and economically viable.

To the extent these last two measures cause certain low production wells to be plugged and abandoned, that again is an excellent co-benefit. Plugging and abandoning these wells now

¹⁸ Figures are available from the EIA's Electric Power Monthly, available here: <https://www.eia.gov/electricity/monthly/>.

will prevent them from having to be plugged and abandoning with public funding in the future after the oil and gas companies transfer the wells to entities which then declare bankruptcy.

II. EPA MUST ACT ON THE ATTAINMENT DEMONSTRATION, ENHANCED MONITORING, RACT, AND CONTINGENCY MEASURES ELEMENTS AND DISAPPROVE THE ATTAINMENT DEMONSTRATION AND CONTINGENCY MEASURES ELEMENTS

In its proposed rule, EPA states that it will take action on the RACT submission for certain sources and enhanced monitoring at a later date and is not taking action on the attainment demonstration and contingency measures, presumably forever, although EPA does not state this or provide any justification for it. 87 Fed. Reg. at 67,617. While EPA may have discretion to divide up action on various SIP elements of a required SIP, such as a serious nonattainment SIP, prior to the mandatory deadline by which EPA must take final action, once EPA illegally missed that Congressional imposed deadline, EPA no longer has discretion to divide up the action. *US Sugar Corp v. EPA*, 830 F.3d 579, 643-644 (D.C. Cir. 2016).

The problem is worsened by the fact that not only has EPA's mandatory deadline to act on the SIP submittal passed, but EPA's mandatory deadline to determine if the Front Range attained by the serious attainment date has already passed. The Clean Air Act's mandatory attainment deadlines "are central to the regulatory scheme." *Sierra Club v. EPA*, 294 F.3d 155, 161 (D.C.Cir.2002) (internal quotation marks and ellipsis omitted). The attainment demonstration and contingency measures both are integrally related to the attainment deadline. Thus, it would be arbitrary and capricious for EPA to ignore these elements and the agency cannot approve them.

In addition, EPA is actually relying on the attainment demonstration for other parts of its proposed approval without determining if the attainment demonstration is adequate. This is arbitrary and capricious. For example, the RACM analysis includes whether measures were necessary to demonstrate attainment. 87 Fed. Reg. at 67,625. The attainment demonstration is what would allow EPA to determine if a measure is necessary or not necessary to demonstrate attainment. But EPA is ignoring the attainment demonstration. We also know that the RACM measures EPA is proposing to approve are not adequate to demonstrate attainment. 87 Fed. Reg. 60,926 (Oct. 7, 2022).

For the reasons explained above, EPA must also take final action on Reg. 7, Part E, Section II's provisions which are the State's RACT determination for landfill and biogas fired engines. This was part of the March 22, 2021 submission. 87 Fed. Reg. at 67,630. Thus, it was deemed complete no later than September 22, 2021 and EPA is in violation of its mandatory duty to take final action on this by no later than September 22, 2022.

As noted above, not only must EPA act on Colorado's 2008 ozone NAAQS serious attainment demonstration and contingency measures, EPA must also disapprove them. The Clean Air Act "requires all nonattainment areas to achieve compliance with the ozone NAAQS

‘as expeditiously as practicable,’ but in all events ‘not later than’ the ‘Primary standard attainment date’ set forth in” 42 U.S.C. § 7511(a)(1). *Natural Resources Defense Council v. E.P.A.* (“*NRDC v. EPA*”), 777 F.3d 456, 464 (D.C. Cir. 2014) (quoting Section 7511(a)(1)); *see also Sierra Club v. E.P.A.*, 294 F.3d 155, 158–59 (D.C. Cir. 2002). EPA lacks authority to modify those statutory deadlines; therefore, the attainment deadline for subsequent iterations of the ozone NAAQS are governed by the applicable “attainment period” contained in 42 U.S.C. § 7511(a)(1). *NRDC v. EPA*, 777 F.3d at 464-69. Thus, for all 2008 “serious” ozone nonattainment areas, including the Front Range, the statute requires the states to attain the 2008 standard “as expeditiously as practicable,” but in no event later than July 20, 2021. 42 U.S.C. § 7511(a)(1).

The 2008 ozone NAAQS is met at an ambient air quality monitoring site when the 3-year average of the annual fourth-highest daily maximum is less than or equal to 75 ppb. And as EPA itself has repeatedly recognized, “[a]ttainment can only be demonstrated with monitoring data from three full and consecutive ozone seasons, which, for areas with year-round ozone seasons, means three full calendar years of monitoring data.” *See NRDC v. E.P.A.*, 777 F.3d at 475 (Randolph, J., dissenting) (citing 77 Fed. Reg. 8,197, 8,204 (Feb. 14, 2012)), This is because pursuant to the 1990 Amendments, “marginal nonattainment areas had three full ozone seasons (1991–1993) between the date of enactment and the November 15, 1993 deadline to attain the NAAQS.” 77 Fed. Reg. 30,160, 30,166 (May 21, 2012). Thus, “in order to attain ‘by’ its attainment date, the area could not consider air quality for an ozone season during which the attainment date falls.” 77 Fed. Reg. at 30,160-01.

Based on monitoring data from 2018 through 2020, the three full ozone seasons before the July 2021 attainment deadline, EPA must disapprove Colorado’s attainment demonstration because the data demonstrates that the Front Range did not attain the 2008 NAAQS. EPA’s proposal recognizes that. 87 Fed. Reg. at 67,625 ft. 75. The three-year average of the fourth highest daily maximum ozone concentration at the controlling monitoring in the Front Range was 81 ppb, well above the standard. 87 Fed. Reg. 60,926, 60,927 (Oct. 7, 2022).

It would be arbitrary, capricious, and contrary to the plain language of the Clean Air Act to approve an “attainment demonstration” that demonstrably failed to meet the NAAQS. Because “monitoring data from three full and consecutive ozone seasons” demonstrates that EPA has already determined that the Front Range is not actually attaining the 2008 standard, EPA must disapprove the attainment demonstration.

Similarly, EPA must disapprove the contingency measures element. The Division’s contingency measures element relies on already implemented control measures. In *Sierra Club v. U.S. EPA*, 21 F.4th 815 (D.C. Cir. 2021), conservation organizations challenged EPA’s SIP Requirements Rule for the 2008 ozone standards, as well as the similar rule for the 2015 ozone standards, with respect to (among other things). The D.C. Circuit rules for the conservation organizations and vacated EPA’s rule that allowed the use of already implemented measures as contingency measures. *Id.*, 21 F.4th at 829. Thus, EPA must disapprove Colorado’s contingency measures which use already implemented measures.

III. EPA MUST DISAPPROVE THE RFP AND MVEB ELEMENTS

EPA proposes to approve the reasonable further progress (“RFP”) requirements for the Front Range Serious 2008 ozone nonattainment area. For Serious areas, the RFP Plan must meet both the general requirements in section 172(c)(2) that are tied to attainment of the ozone standards and the specific requirements in section 182(c)(2)(B) for reductions in emissions of VOCs from baseline emissions. Furthermore, the “plan shall provide for such annual reductions in emissions of volatile organic compounds and oxides of nitrogen as necessary to attain the national primary ambient air quality standard for ozone by the attainment date applicable under this chapter.” 42 U.S.C. § 7511a(b)(1)(A). *See also* 42 U.S.C. § 7511a(c) (applying 42 U.S.C. § 7511a(b)(1)(A) to serious nonattainment areas). EPA has not proposed to approve an attainment demonstration for the Front Range nonattainment area, so there is no basis to conclude that the RFP Plan meets the general requirements in section 172(c)(2). Furthermore, we know that the annual reduction of VOCs and NO_x were not sufficient to attain the 2008 primary ozone NAAQS by the serious attainment date because EPA already found that the Front Range did not attain the 2008 primary ozone NAAQS by the serious attainment date. Thus EPA must disapprove the RFP element. The same logic applies to the motor vehicle emission budget.

A. Statutory and Regulatory Background for RFP.

Subpart 1 of Part D of Title I of the Act provides the general requirements for attainment plans, including the general requirement in section 172(c)(2) for attainment plans to require RFP.¹⁹ RFP in turn is defined in section 171 as:

[S]uch annual incremental reductions in emissions of the relevant air pollutant as are required by [Part D] or may reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date.²⁰

Subpart 2 provides specific requirements for ozone nonattainment areas. For Moderate ozone areas, specific RFP requirements are provided in section 182(b)(1)(A)(i), which states in relevant part:

By no later than 3 years after November 15, 1990, the State shall submit a revision to the applicable implementation plan to provide for volatile organic compound emission reductions, within 6 years after November 15, 1990, of at least 15 percent from baseline emissions, accounting for any growth in emissions after 1990. Such plan shall provide for such annual reductions in emissions of volatile organic compounds and oxides of nitrogen as necessary to attain the

¹⁹ 42 U.S.C. § 7502(c)(2).

²⁰ *Id.* § 7501(1).

national primary ambient air quality standard for ozone by the attainment date applicable under this chapter.²¹

Serious areas must meet all requirements applicable to Moderate areas.²² In addition, section 182(c)(2)(B) requires, for areas classified Serious and above, a demonstration that the plan will achieve 3% VOC reductions per year from the starting point (“baseline emissions”), except in two limited circumstances.

The Moderate area provision, section 182(b)(1)(A)(i), was, like the rest of subpart 2 of part D, title I, added to the Act in the Clean Air Act Amendments of 1990.²³ In the context of post-1990 implementation rules for revised ozone standards, EPA has interpreted this provision three times:

1. The “Phase 2 Rule” for the 1997 ozone standards;²⁴
2. The “SIP Requirements Rule” for the 2008 ozone standards;²⁵ and
3. The “SIP Requirements Rule” for the 2015 ozone standards.²⁶

In its proposal for the “Phase 2” rule for implementation of the 1997 ozone standards, EPA noted that the plain language of section 182(b)(1)(A)(i) did not allow for substitution of NO_x emission reductions for VOC emission reductions. EPA stated:

Currently, for many areas of the country, particularly in the Eastern U.S. outside major metropolitan areas, there is a greater need for NO_x reductions rather than VOC reductions.

EPA accordingly proposed an option for Moderate ozone areas that had already met the section 182(b)(1)(A)(i) requirement (referred to by EPA as the initial “rate-of-progress” or “ROP” requirement) for the previous 1-hour ozone standards to instead “be covered under the generic RFP requirements of subpart 1” of part D, title I.

For areas that had not previously met the initial ROP requirement, “section 172(c)(2) also applies, requiring areas to meet RFP generally. Therefore, a [M]oderate area would also have to provide any additional emissions reductions—VOC and/or NO_x—needed to provide for attainment by the area’s attainment date.”²⁷

²¹ *Id.* at 7511a(b)(1)(A)(i).

²² *Id.* § 7511a(c).

²³ Pub. L. 101-549, § 103; 104 Stat. 2428.

²⁴ 68 FR 32802 (June 2, 2003) (proposal); 70 FR 71612 (Nov. 29, 2005) (final).

²⁵ 78 FR 34178 (June 6, 2013) (proposal); 80 FR 12264 (Mar. 6, 2015) (final).

²⁶ 81 FR 81276 (Nov. 17, 2016) (proposal); 83 FR 62988 (Dec. 6, 2018) (final).

²⁷ 68 FR at 32834.

EPA further proposed to subdivide areas that had already met the initial ROP requirement into three cases, depending on the length of time between designation and the attainment date. Except for those areas with an attainment date 3 years or less after designation, RFP would at a minimum require the emissions reductions necessary to attain by the attainment date.²⁸

In the final “Phase 2” rule,²⁹ EPA modified this proposal to subdivide the areas into two cases, depending on whether the attainment date was beyond 5 years after designation. In both cases, RFP would at a minimum consist of emission reductions necessary to reach attainment.

In EPA’s Rule for the 2008 Ozone Standard, EPA stated, “the purpose of the RFP provisions in CAA sections 172 and 182 is to foster the achievement of reasonable further progress toward attainment[.]”

B. The RFP Plan Does Not Satisfy RFP Requirements Because It Does Not Ensure Attainment.

Again, the plain language of the Clean Air Act provides that for the RFP element: “Such plan shall provide for such specific annual reductions in emissions of volatile organic compounds and oxides of nitrogen as necessary to attain the national primary ambient air quality standard for ozone by the attainment date applicable under this chapter.” As noted above, EPA has, as it must, interpreted the plain language consistent with its plain meaning.

As explained in the Phase 2 Rule, Moderate areas, even those with a specific VOC emission reduction requirement (the ROP requirement) must also meet the general RFP requirement in subpart 1 for incremental emission reductions that ensure attainment. By the same logic, the general RFP requirement in subpart 1 applies equally to Serious areas, in addition to the specific VOC emission reduction requirement. The general RFP requirement in section 172(c)(2) goes hand-in-hand with the requirement to demonstrate attainment by the applicable attainment date. For Moderate areas, this requirement is in section 172(c)(1), while for Serious areas the attainment demonstration requirement (along with a requirement for photochemical grid modeling or equivalent method) is in section 182(c)(2)(A).

The regulatory text for the SIP Requirements Rule, which applies directly here, makes this clear: For areas “classified as Moderate or higher,” which includes Serious areas, “the area is subject to the RFP requirements under CAA section 172(c)(2).” For areas “classified as Serious or higher, the area is *also* subject to RFP under CAA section 182(c)(2)(B).” Thus, the section 182(c)(2)(B) requirements are in addition to the general requirements under section 172(c)(2).

Thus, an RFP plan for a Serious area must meet the general requirement of annual incremental emission reductions as necessary to ensure attainment. But EPA has not approved the attainment demonstration for the Front Range area and does not propose to approve. Rather, EPA has already determined that the Front Range did not attain the 2008 ozone NAAQS by its serious attainment date. Thus, EPA has no basis in this action to conclude that the submitted

²⁸ 68 FR at 32835.

²⁹ 70 FR 71612 (Nov. 29, 2005).

incremental emissions reductions in the RFP Plan would ensure attainment, and therefore cannot approve them as meeting the RFP requirements.

Furthermore, we note that the RFP relies on the emission inventory but as explained elsewhere in these comments, the emission inventory is defective. Thus this is an independent ground for EPA to disapprove the RFP.

Colorado relies on the 2017 and 2020 emissions inventories in the Serious SIP submittal to demonstrate that the RFP element in its submittal meets the requirements of Sections 182(b)(1) and 182(c)(2)(B) of the Clean Air Act. *See* 87 Fed. Reg. at 67,621; Colorado OAP at 4-1, 4-21 to 4-22. Because Colorado's RFP analysis is based on emissions inventories that the Division has acknowledged and withdrawn as erroneous, the RFP analysis is fundamentally flawed. Accordingly, EPA must disapprove this element of the SIP submittal. Colorado has withdrawn its RFP analysis for the severe 2008 ozone SIP that is currently in development before the Air Quality Control Commission. Ex. 21 at 5. Given that Colorado itself has deemed it necessary to fix the RFP analysis for the severe SIP because of the inventory mistakes, EPA should require the same for the RFP analysis for the serious SIP.

C. EPA must also disapprove the submitted motor vehicle emission budgets (“MVEBs”).

EPA itself says in the proposed rule that MVEB must demonstrate attainment. 87 Fed. Reg. at 67,627. But EPA has already found that the Front Range did not attain the 2008 ozone NAAQS by its serious attainment date. Thus, EPA must disapprove the MVEB.

Section 176(c)(1) of the Act contains the general requirements for “conformity” of Federal actions, including actions such as highway projects that receive Federal funding. Federal actions must not (among other things) “delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.” MVEBs are correspondingly defined in EPA's transportation conformity rules as:

[T]hat portion of the total allowable emissions defined in the submitted or approved control strategy implementation plan revision or maintenance plan for a certain date for the purpose of meeting reasonable further progress milestones or **demonstrating attainment** or maintenance of the NAAQS, for any criteria pollutant or its precursors, allocated to highway and transit vehicle use and emissions.³⁰

As EPA must disapprove the submitted RFP Plan, EPA cannot determine that the budgets are allowable as a portion of the total allowable emissions to meet RFP or attainment. There is no measure of total allowable emissions for RFP in the absence of an approvable RFP plan and therefore no basis for approval of the MVEBs.

³⁰ 40 C.F.R. § 93.101 (emphasis added).

And the submitted MVEB significantly exceed estimated motor vehicle emissions. The transportation conformity rules allow for a so-called “safety margin”—more properly, a “pollution margin”—that inflates the MVEBs so long as applicable requirements, including attainment and RFP, are met. Here, the projected VOC and NO_x on-road emissions are less than the MVEBs. However, as RFP requirements are not met, the “safety margin” does not satisfy the definition, and therefore the inflated MVEBs cannot be approved.

The absence of an approved attainment demonstration is fatal to EPA’s proposed approval of the RFP Plan, and that in turn is fatal to EPA’s proposed approval of the MVEBs. But the absence of an approved attainment demonstration is also directly fatal to EPA’s proposed approval of the MVEBs. Under section 176(c)(1)(B)(iii), a Federal action cannot “delay timely attainment of any standard.” Without an approved attainment demonstration, which could require VOC and NO_x emission reductions beyond those required by section 182(c)(2)(C), there is no way to tell if a transportation plan, improvement program, or project will “delay timely attainment” of the 2008 ozone standards, even if it stays within the proposed MVEBs. In reality, we know that the MVEB did delay attainment because EPA already determined that the Front Range did not attain by the serious attainment date. Thus, the proposed MVEBs cannot ensure conformity of transportation plans, improvement programs, or projects, and must be disapproved.

This shows the two issues resulting from the absence of an approved attainment demonstration and control strategy—RFP and MVEBs—are intertwined. If the RFP Plan satisfied the requirements for incremental emission reductions to ensure attainment—which it does not—then EPA’s approach here would be legitimate. EPA could indeed look at just the RFP Plan when approving the MVEBs, because the RFP Plan in turn would ensure timely attainment. This in turn reinforces the point above that RFP plans must always meet the general RFP requirements to attain.

EPA rules for transportation conformity also confirm the connection between attainment and MVEBs. The term “control strategy implementation plan revision” is defined as the “implementation plan which contains specific strategies for controlling the emissions of and reducing ambient levels of pollutants in order to satisfy CAA requirements for demonstrations of reasonable further progress *and* attainment.”³¹ For attainment plans (as opposed to maintenance plans), MVEBs are in part defined as “that portion of the total allowable emissions defined in the submitted or approved *control strategy implementation plan revision*.”³² Thus, the MVEBs depend on the control strategy implementation plan revision, which must demonstrate *both* RFP and attainment. The submitted MVEBs must be disapproved and EPA’s adequacy determination, if completed, must be withdrawn.

³¹ 40 C.F.R. § 93.101 (emphasis added).

³² *Id.* (emphasis added).

IV. EPA CANNOT GIVE THE DIVISION ANY CREDIT IN ANY SIP ELEMENT FOR FEDERALLY UNENFORCEABLE STATE-ONLY RULES

Colorado cannot take credit in any SIP element for emissions reductions driven by state-only requirements that are not federally enforceable. 42 U.S.C. § 7511a(b)(1)(C) and (D) (“General rule for credibility of reductions”); *see also id.* § 7511a(c). According to the proposed rule and Colorado’s serious ozone attainment plan,³³ several of the elements in Colorado’s SIP submittal credit emissions reductions from measures that are not federally enforceable—the 2017 and 2020 emissions inventories and the RFP analysis deriving from them.

The 2017 and 2020 inventories are based on “actual data collected in 2017,” Colorado OAP at 3-2, including “actual data for the oil and gas sector and stationary sources,” 87 Fed. Reg. at 67,620. With respect to the data for oil and gas sources, emissions were estimated based on “actual data” reported by the oil and gas industry for point sources and condensate/oil tanks. Colorado OAP, at 3-2, 3-4 to 3-5; *id.* at 4-12 to 4-15; *see also* 87 Fed. Reg. at 67,620. The methodology Colorado used to convert this actual data into emissions estimates does not differentiate between emissions reductions driven by state-only control measures, including state-only measures in Colorado’s Regulation 7 (*see, e.g.*, Colorado OAP at 4-8 to 4-10), and those driven by federally enforceable control measures, and therefore it improperly credits emissions reductions from state-only measures. For condensate and oil tanks, Colorado used data from industry to develop capture efficiency (CE) and rule effectiveness (RE) emissions factors to estimate tank emissions on a per facility basis. Colorado OAP at 3-4. This information also went into developing the 2020 attainment year inventory. *Id.* at 4-14 to 4-15. Colorado’s methodology improperly credits emissions reductions resulting from state-only rules through these emission factors because of its failure to differentiate between state and federal requirements.

In fact, Colorado appears to explicitly take credit for state-only reductions through these variables, stating that “the capture of emissions has increased due to state and federal regulatory requirements, greater state and federal compliance and enforcement efforts” *Id.* at 3-5. Emissions data were also provided by industry for development of the portions of the inventories related to oil and gas point sources and oil and gas area sources. *Id.* at 3-3, 3-5, 4-13, 4-15.

The point sources portion of the emissions inventories is also based on industry reported data, and similarly fails to distinguish between state-only and federally enforceable emissions reductions. *Id.* at 3-6. State-only emissions reductions are improperly built into this portion of the 2017 inventory and, by extension, the 2020 attainment year inventory.

Colorado’s RFP analysis is premised on the emissions inventories. Colorado OAP at 4-21 to 4-22; 87 Fed. Reg. at 67,621. Accordingly, the improperly credited emissions reductions in the inventories necessarily affect the RFP element. EPA cannot permit Colorado to take credit for state-only reductions in its RFP analysis.

³³ 2020 Denver Metro/North Front Range Serious Area Ozone SIP, EPA-R08-OAR-2022-0632-0027 (March 22, 2021) (“Colorado OAP”).

V. EPA MUST DISAPPROVE THE NONATTAINMENT NEW SOURCE REVIEW ELEMENT BECAUSE IT EXCLUDES “TEMPORARY EMISSIONS” AND EMISSIONS FROM INTERNAL COMBUSTION ENGINES ON A VEHICLE FROM THE DETERMINATION OF WHETHER A SOURCE IS MAJOR FOR NNSR PURPOSES

The Colorado regulations that make up Colorado’s serious nonattainment New Source Review (“NNSR”) permitting program include 5 CCR 1001-5, Part D, II.A.25.f, which provides:

Emissions caused by indirect air pollution sources (as defined in Section I.B.24. of Part A of this regulation), emissions from internal combustion engines on any vehicle, and emissions resulting from temporary activities, such as construction or exploration, shall be excluded in determining whether a source is a major stationary source. Emissions from ongoing construction are not considered to be temporary emissions and are included in determining whether a major modification will occur.

EPA must disapprove the SIP submittal because these requirements are different from and less stringent than EPA’s NNSR program requirements for ozone SIPs.

Specifically, 40 C.F.R. § 51.165, which is referenced by 40 C.F.R. § 1314, and the Clean Air Act do not allow of the exclusion of emissions resulting from temporary activities such as construction or exploration. The definition of “potential to emit,” the basis for determining if a source is a major or minor source, does include an exclusion for secondary emissions, which Colorado refers to as indirect air pollution sources. 40 C.F.R. § 51.165(a)(1)(iii). EPA’s regulations also specifically address when fugitive emissions can be excluded in determining when a source is major for NNSR purposes. So, in addition to the fact that the plain language of EPA’s regulations does not include an exclusion for temporary emissions, the inclusion of these two exclusions in the federal regulations indicates that additional exclusions were not intended. The temporary activities exclusion makes Colorado’s NNSR SIP less protective than EPA’s regulations. Therefore, EPA must disapprove this submittal.

Commenter Center for Biological Diversity initially identified this problem for EPA when EPA approved Colorado’s NNSR SIP submittal to meet the nonattainment requirements for marginal ozone nonattainment areas for the 2015 8-hour ozone NAAQS. *See* Air Plan Approval; Colorado; Denver Metro/North Front Range Nonattainment Area; Nonattainment NSR Permit Program Certification for the 2015 8-Hour Ozone Standards, 87 Fed. Reg. 29,232 (May 13, 2022). Commenter Center for Biological Diversity discussed the illegal exclusion of temporary emissions and internal combustion engines on vehicles in its opening brief in its direct appeal of EPA’s final rule in Case No. 22-9546 in the United States Court of Appeal for the Tenth Circuit, which is currently pending. *See* Ex. 22 at 18–19, 28–40. This illegal exclusion was not remedied by the Colorado SIP submittal that is the subject of this rulemaking. Thus, for the reasons set forth in the brief EPA must disapprove the NA NSR element.

VI. EPA MUST DISAPPROVE THE EMISSION INVENTORIES

A. EPA must disapprove the 2017 milestone emissions inventory and the 2020 attainment year inventory because the Division discovered a mistake in the inventories.

The Division has recently admitted that the emission inventories it developed for 2017 and later years, in the context of its severe 2008 ozone SIP, are incorrect because of “a calculation error regarding emissions associated with oil and gas pre-production activities. *See* Colorado Department of Public Health and Environment, Notice of Temporary Withdrawal of Limited Parts of the Severe SIP, at 1 (Nov. 11, 2022) (Ex. 21). As a result, on November 11, 2022, the Division withdrew these inventories from the rulemaking for the severe ozone SIP that is currently pending before the Air Quality Control Commission. *Id.* This significant miscalculation means that Colorado’s erroneous emission inventories undercount nitrogen oxide emissions from oil and gas pre-production activities by half, and significantly underestimate emissions of volatile organic compounds. Because the inventories EPA proposes to approve contain this significant, admitted error, EPA must disapprove the SIP.

The 2017 milestone inventory in Colorado’s serious SIP submittal contains the same mistakes as those in the 2017 inventory the Division recently withdrew. *Cf.* Colorado OAP at Appendix 3-A, page 3-13 *with* Ex. 21 at 3. The Division has corrected its inventory estimates, but these corrections are not present in the inventories EPA is proposing to approve. In the table below, the Division’s corrected 2017 inventory values are compared to the values the Division recently withdrew through Ex. 21 and the 2017 milestone inventory values.

Activity	Corrected 2017 Inventory Values ³⁴		Withdrawn Severe 2017 Inventory Values ³⁵		Serious 2017 Milestone Inventory Values ³⁶	
	NOx	VOC	NOx	VOC	NOx	VOC
<i>Drilling</i>	12.36	1.20	9.41	0.89	9.4	0.9
<i>Fracking</i>	29.16	4.75	11.78	2.62	11.8	2.6
<i>Venting</i>	0.19	1.72	0.11	3.13	0.1	3.1

Similarly, the 2020 attainment year inventory in Colorado’s serious SIP submittal, which is developed from the 2017 milestone inventory and thereby perpetuates the errors, contains the same underestimates as the 2023/2026 inventories the Division withdrew. *Cf.* Colorado OAP, at Appendix 4-A, page 4-24, *with* Ex. 21 at 3.

³⁴ Ex. 21 at 3.

³⁵ *Id.* Any minor discrepancies between the withdrawn values and the values EPA is proposing to approve in this action appear to be due solely to rounding.

³⁶ Colorado OAP at App. 3-A, p. 3-13.

Activity	Corrected 2023/2026 Inventory Values ³⁷		Withdrawn Severe 2023/2026 Inventory Values ³⁸		Serious 2020 Attainment Year Inventory Values ³⁹	
	NOx	VOC	NOx	VOC	NOx	VOC
<i>Drilling</i>	9.68	0.94	7.37	0.70	7.4	0.7
<i>Fracking</i>	22.84	3.72	9.23	2.05	9.2	2.0
<i>Venting</i>	0.15	1.35	0.09	2.45	2.5	0.1

The Division withdrew the erroneous inventories because of their potential impact on the severe SIP’s reasonable further progress element and its attainment demonstration. Ex. 21 at 5. Colorado itself has admitted the inaccuracy of the inventories that EPA is proposing to approve. EPA must disapprove the SIP because of these erroneous inventories. In response to the Division’s admission of the erroneous inventories, EPA has required Colorado to “make updates to it [sic] emissions statements for the Marginal SIP under the 2015 ozone NAAQS” to rectify this mistake. *Id.* at 4. EPA should require Colorado to make the same corrections for its serious SIP submittal under the 2008 ozone NAAQS.

B. The Use of an Emission Inventory for a Typical Summer Day Rather than For a Hot, Sunny, Summer Day is Arbitrary and Capricious.

EPA also explains that the emission inventory is for a “typical summer day”. 87 Fed. Reg. at 67,620. EPA further explains that the 2020 inventory is based on emission estimates for an **average** episode day. 87 Fed. Reg. at 67,620. EPA must disapprove the emission inventory based on a typical summer day because it is arbitrary and capricious for two reasons.

First, Denver suffers from high ozone levels during the winter. EPA cannot ignore this important aspect of the problem. For example, on 03/18/2021, the Platteville Atmospheric Observatory (PAO) monitor had an 8-hour daily maximum value of 68 ppb. Ex. 3 at 2.⁴⁰ The next day, on 03/19/2021, PAO had an 8-hour daily maximum value of 89 ppb. Ex. 4 at 2. And the day after that, in 03/20/2021, PAO had an 8-hour daily maximum value of 82 ppb. Ex. 5 at 2. Also on that day, the Boulder Reservoir (BOUR) had an 8-hour daily maximum of 77 ppb, the Fort Collins West (FTCW) had an 8-hour daily maximum of 86 ppb, and the Rocky Flat (RFN) monitor, which is typically one of the worst monitors in the nonattainment area, had an 8-hour daily maximum of 74 ppb. Ex. 5 at 2. Two of Weld County’s “private” ozone monitors, the Missile Site Park and Hereford monitors, also picked up this “wintertime ozone event.” Ex. 6.

EPA cannot speculate, or simply declare without data, that these values were caused by stratospheric intrusion or wildfire. They were not. Rather, like the Upper Green River Basin Area and the Uinta Basin, which EPA designated nonattainment based on wintertime ozone, the

³⁷ Ex. 21 at 3.

³⁸ *Id.*

³⁹ Colorado OAP at App. 4-A, p. 4-24.

⁴⁰ The Colorado monitoring data is available here: <https://www.colorado.gov/airquality/report.aspx>.

PAO is near the heart of a significant oil and gas basin in the West where sunny days with snow on the ground is common. And 03/18 -20/2021 were sunny days with snow on the ground. Monitors in nearby areas with less intense oil and gas activities but which receive pollution from the Denver Julesburg Basin, like BOUR, FTCW, RFN, had lower ozone values but still above the level of the 2015 ozone NAAQS. Monitors further away from the Denver Julesburg basin, such as NREL, had lower levels. It would not be a credible claim that a stratospheric intrusion happened to hit only the Denver Julesburg Basin oil and gas field, and not other nearby areas, for multiple days.

The Division emission inventory, and the other elements based off the emission inventory such as the RFP, completely ignore wintertime ozone. Therefore, EPA must disapprove them.

Second, on hot, sunny summer days, as opposed to typical summer days, ozone levels are highest in part because emissions are highest. For example, emissions from thermal electric generating units are higher on hot, sunny summer days than typical summer days because overall electricity demand is higher because of the load created by air conditioners and evaporative coolers. EPA acknowledges this in its latest interstate ozone rule and in the work of the ozone transport commission but contrary to the approach the agency ought to take in acting in accordance with its findings, it is proposing to ignore it. Similarly, air conditioning in mobile sources such as cars, trucks, and buses increases their emissions. Thus, the use of average or typical day for emissions ignores the form and averaging time of the 2008 ozone NAAQS and would be arbitrary and capricious.

C. The Emission Inventory is Not Credible with Regard to VOCs from Condensate/Oil Tanks.

Emissions of VOCs from Condensate/Oil Tanks drop by more than 50% between 2017 and 2020 in the Division's emissions inventory. 87 Fed. Reg. at 67,621. This is a fantastical claim. Production of oil increased from 129,955 thousand barrels in 2017 to 171,636 thousand barrels in 2020.⁴¹ This is a 32% increase in oil. The only way that such a massive decrease in VOC emissions could be obtained from condensate/oil tanks between 2017 and 2020 is if there was a massive retrofitting of flares on existing tanks between 2017 and 2020 pursuant to a SIP rule. But flares produce NOx. The emission inventory claims that NOx from condensate/oil tanks decreased from 1.4 to 0.6. 87 Fed. Reg. at 67,621. This is a 57% decrease in NOx. It is simply not possible to have a massive retrofitting of flares on existing tanks between 2017 and 2020 and also have a massive decrease in NOx. Thus, EPA must disapprove the emission inventory because the emissions from condensate/oil tanks is arbitrary and capricious.

D. The Emissions Inventory Also Ignores Other Sources.

Clean Air Act §182(a)(1) mandates that the emission inventory be a comprehensive, accurate, current inventory of actual emissions from all sources. Unfortunately, the emission inventory does not meet this mandate.

⁴¹ See Ex. 1 EIA Colorado Field Production of Crude Oil available here: <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCRFPCO1&f=M>.

It appears that the emission inventory does not comprehensively include all sources of emissions. The technical support document appears to include some oil and gas pre-production emissions, but some is not all.

The emission inventory includes zero NOx emissions from agricultural area sources. But agricultural soils, including those which have fossil fuel derived fertilizers, are a huge source of NOx emissions. One study on this topic is by Maya Almaraz, who is at University of California at Davis, a school noted for its work on agriculture. *See Almaraz, M. et al*, Agriculture is a major source of NOx pollution in California, *Sci. Adv.* 2018, attached as Ex. 8. In this study, two methods were used: a bottom-up spatial model of soil NOx emissions and a top-down approach from airborne observations. *Id.* at 1. This study found that cropland soil increased the NOx budget by 20 to 51%. *Id.*

In addition, residential fuel combustion is excluded from the emission inventory. The Emission Inventory claims this is “because emissions from this category are negligible in the summer.” First, as discussed elsewhere, wintertime ozone is a problem in the Front Range nonattainment area. Furthermore, residential fuel combustion occurs in hot water heaters and cooking stoves, as well as furnaces. While people may not use their furnaces in the summer, they certainly use their hot water heaters and cooking stoves. There is no evidence in the record that emissions from hot water heaters and cooking stoves are negligible. And there is evidence in these comments demonstrating that appliances, including water heaters and cooking stoves, are a significant source of NOx emissions throughout the year (see below). So it is arbitrary to exclude this source of NOx and VOC emissions.

It is worth noting that natural gas and propane burning cook stoves are a source of serious indoor air pollution.⁴² EPA could obtain significant co-benefits for public health by regulating these sources. But the first step in regulating them should be including them in the emissions inventory.

Furthermore, all of the information in the inventory for point sources, oil and gas industry included, come from the APENs. However, by exclusively using the APENs as the only source of information, the inventory is excluding the emissions from sources that are APEN-exempt. These APEN-exempt sources maybe small or of short duration, but they are numerous and many of them are routine parts of oil and gas activities.

Colorado Regulation 3 Part A.II.D includes a list of all the APEN-exempt sources. The most notable are sources with less than 1 ton/year of emissions inside the ozone nonattainment area (or less than 2 ton/year outside the nonattainment area), internal combustion engines rated below 5 MMBTU/hr, construction activities with less than 6 months of duration, and oil and gas operations (well site and associated equipment) during the exploration and/or production drilling, workovers, completions and testing.

⁴² *See, e.g.*, <https://rmi.org/insight/gas-stoves-pollution-health>.

Most, if not all the above are part of any oil and gas site both in their initial stage and/or later during their production phase; from clearing and grading the terrain, building roads, transporting material, drilling, using small power generators engines, small heaters, and small flares. Because APENs are not submitted per facility but per individual piece of equipment, many of these units are small enough to be exempt and therefore are not accounted for in the inventory.

One of these individual sources may be relatively insignificant, but when counted by the hundreds or the thousands, their emissions are impactful and warrant including them in the inventory. Notably, APEN-exempt sources are required to be reported to the Division even if no permit is issued to them, so the Division could and should calculate those emissions and include them in the inventory.

As for mobile sources, there is no indication that the emission inventory includes “cheating” diesel engines like Volkswagens. The Division is well-aware of the widespread diesel engines which use defeat devices to pass tailpipe tests, as the state got significant money from the settlement. But in this emission inventory, the Division appears to have ignored this issue.

Also, it does not appear that the mobile source inventory considered “collector cars” which are exempt from emission testing, or cars which have obtained a repair waiver. These old cars can have emissions which are an order of magnitude, or more, higher than modern cars. And the current regulations do not in any way prohibit people from using these cars as their primary means of transportation on a daily basis.

As to non-road sources, which include heavy duty equipment used in mining, construction, and oil & gas exploration and production, they are underestimated because the Division does not regulate them, these types of vehicles do not require license plates, and only some of them require registration at a county office. As a result, the Division does not know with certainty how many of them are there operating at a given time inside the ozone nonattainment area. Yet many of these units have very large engines that generate significant amounts of NOx and other pollutants.

Similarly, the mobile source emission inventory does not appear to address Colorado’s unusually high “cut points” for its emission testing for vehicles. Using generic emission factors rather than one’s specific to Colorado is not accurate. And Small engines, which are often more heavily polluting than the larger engines likewise generate significant emissions.

As to the requirement that the emission inventory be accurate and reflect actual emissions, this emission inventory fails in this regard also. For point sources, the emission inventory uses APENs. Especially for power plants, which tend to operate and thus emit more in the summer, the emission inventory should use emission data from continuous emissions monitoring systems (CEMS). This would be accurate information about actual emissions and is readily available.

In fact, it does not appear that there is any actual emissions data in the inventory at all. Rather, the emissions inventory is based on the use of generic emission factors. There is no evidence to support a claim that these generic emission factors reflect actual emissions.

For example, the emission inventory says that condensate tanks are the largest source of VOC emissions. Many of these condensate tanks are controlled by an enclosed flare. Although the transparency is so lacking that we are forced to assume, we assume that the emission inventory assumes that all of these enclosed flares reduce VOCs by 95 or even 98%. But the Division, has no evidence that actual emissions reflect 95% or higher removal efficiency. This is because there were requirements for testing or monitoring emissions from enclosed flares in the time periods covered by the emissions inventory. The Emission Inventory's assumption that regardless of how old the flare is, what condition it is, and what operating conditions it faces, it will always achieve at least 95% removal efficiency without any data to support this is an arbitrary assumption.

For area sources, the emissions inventory states it used data from the 2014 NEI and adjusted to 2017. Colorado saw a 39% growth in oil production between 2014 and 2017. *See* EIA Data, attached as Ex. 1. The documents provided do not provide enough transparency to determine if the emission inventory reflects this substantial increase in actual production, and thus emissions. EPA cannot approve the emission inventory unless it knows that the emission inventory does reflect this 39% increase in oil production.

E. Top Down “Inventories” or Flux Estimates Demonstrate that the Division’s Bottom Up Emissions Inventory Undercounts Emissions.

The scientific literature shows that bottom up emission inventories, like the one before EPA, underestimate oil and gas emissions. Helmig, D. 2020. Air Quality Impacts from Oil and Natural Gas Development in Colorado, *Elem Sci Anth*, 8: 4, Attached as Ex. 7 at 20. This literature is based on actually measuring pollution by “aircraft profiling upwind and downwind of production regions, determination of horizontal winds and boundary layer depth [Karion et al., 2013; Karion et al., 2015; Peischl et al., 2015; Peischl et al., 2018].” *Id.*

Problems with the bottom up inventories include “extrapolation of limited information of facility-scale emissions from venting, flashing, and leakage, and the neglect of differences in practices of operators.” *Id.* Also, the bottom up inventories are annual averages with little to no temporal information. *Id.* In fact, the Division has explained before that: “Emissions data that were on an annual basis were apportioned to a daily rate by dividing by 365.”

The underestimation is significant. *Petron et al.*, [2012] found that “uncertainties attached [to bottom up regulatory] estimates can be as high as a factor of two.” *Id.* Benzene, a known human carcinogen, “were too low by at least a factor of five.” *Id.*

Tzompa-Sosa et al., [2017] found that even increasing the fossil fuel emission inventory by 40% in the Central U.S., including Colorado, was not enough to yield agreement with observations. *Id.* “Pfister et al. [2017a], in their modeling of FRAPPE and DISCOVER-AQ

data, found that they had to increase O&NG non-ethane emissions by a factor of four over their best inventory estimate for the best match between observations and model output.” *Id.* The most recent study mentioned in the Helmig paper, *Peischl et al.*, 2018, found that Regional Air Quality Council VOC estimate undercounted by a factor of approximately three when compared to data from NOAA aircraft surveying.

In light of the above, EPA must disapprove the emission inventory. As explained elsewhere, this means EPA must also disapprove elements like the RFP and MVEB, which rely on the emissions inventory.

VII. EPA HAS FAILED TO COMPLY WITH CLEAN AIR ACT § 110(l)

EPA’s Clean Air Act § 110(l) analysis simply offers conclusory statements that the Colorado SIP revisions do not interfere with any applicable requirements. 87 Fed. Reg. at 67,633. Relying solely on conclusory statements is arbitrary and capricious.

Furthermore, approval of this SIP violates Clean Air Act § 110(l) because approval interferes with the Front Range attaining the 2008 SIP by the serious attainment date. We know this because EPA has already determined that the Front Range did not attain by its serious attainment date. Approval of this SIP also interferes with the Front Range attaining the 2015 ozone NAAQS by both its marginal and moderate attainment date. We know that this SIP’s RACM, RACT, and RFP did not allow the Front Range to attain the 2015 ozone NAAQS by the marginal attainment date because EPA made that finding. The same is true for the contingency measures which, but for EPA’s illegal delays, should be in place right now reducing emissions. Furthermore, Colorado has admitted that its 2015 ozone NAAQS moderate nonattainment SIP will not attain the 2015 ozone NAAQS by the moderate attainment date.

To the disappointment of some environmental groups, the division still plans to proceed with a separate plan to bring ozone levels in line with the tougher 70-parts-per-billion standard, even though regulators have already acknowledged that it’s not sufficient to meet the threshold by a 2024 federal deadline. Mike Silverstein, the director of the Regional Air Quality Council, has said there’s no chance the Front Range will meet the deadline and that submitting the inadequate plan is a strategy to buy more time. Once the EPA downgrades the region from a "moderate" to a "serious" violator under the tougher standard, the region will have until 2026 to meet the stricter standard. Since the same deadline applies to the looser standard, the region can align around a four-year plan to reduce ozone emissions.

See Ex. 9. EPA’s approval of the 2008 ozone NAAQS SIP would interfere with attaining the 2015 ozone NAAQS by the moderate attainment plan. It is only by disapproving the 2008 ozone NAAQS serious SIP and promulgating a FIP that the Front Range can hope to attain the 2015 ozone NAAQS by the moderate attainment plan.

And then there are NO_x and PM_{2.5}. EPA conducted no analysis of whether the 2008 ozone NAAQS serious SIP will interfere with attainment of these. NO_x has its own NAAQS as well as being a precursor, along with VOCs, to PM_{2.5}. Polluters like Suncor are regulated under RACT, and should be regulated under the RACM and RFP elements of the 2008 ozone NAAQS serious SIP. This SIP allows Suncor to cause violations of the NO_x NAAQS. *See* Ex. 10 at 20 (Suncor causes NO_x NAAQS violations even without modeling all emission points at Suncor and without including nearby sources); *See also* Ex. 11 at 5 (The Division conducted its own modeling which showed NO_x NAAQS violations). Suncor is just one example. A JBS slaughterhouse in the Front Range also is permitted to cause NO_x NAAQS violations under the proposed SIP. Ex. 12 at 10. There are also approximately 10,000 enclosed combustion devices at oil and gas well pads in the Front Range. Yet, EPA has absolutely no evidence that the SIP requirements for these emission points will not cause violations of the NO_x NAAQS. Thus, EPA's approval of the 2008 ozone NAAQS serious nonattainment SIP would be contrary to law.

VIII. EPA MUST DISAPPROVE THE RACT & RACM ELEMENTS

Under section 172(c) of the Clean Air Act, 42 U.S.C. § 7502(c), the Front Range was required to attain compliance with the 2008 eight-hour ozone standard of .075 ppm as expeditiously as practicable, but no later than July 10, 2021. As explained above, the Front Range failed to attain the 2008 ozone NAAQS by the serious attainment. Despite the Clean Air Act's clear requirement under these circumstances to implement "*all* reasonably available control measures," ("RACM") *including* "reasonably available control technology" ("RACT") as expeditiously as practicable, EPA and the Division declined to meaningfully evaluate (let alone implement) any such controls. Ignoring its own finding that the Front Range failed to attain, which the Division and EPA knew would be the case even while the Division was passing the serious nonattainment SIP at the state EPA essentially concludes that current regulations and emission controls are good enough. EPA is wrong, and must reevaluate all such controls.

A. The Legal Standard for RACM and RACT.

Under section 172(c)(1) of the Clean Air Act, 42 U.S.C. 7502(c)(1), each nonattainment state implementation plan "shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." Thus, as EPA has made clear, "in addition to demonstrating attainment, air agencies are required to conduct a Reasonably Available Control Measures (RACM) analysis to determine if they can advance their attainment date. Since areas are required to attain as expeditiously as practicable, results of the RACM analysis may indicate attainment can be achieved earlier."⁴³

⁴³ 2014 Modeling Guidance at 17.

In order for the EPA to determine whether an area has provided for implementation as expeditiously as practicable,” the State must explain why the selected implementation schedule is the earliest schedule based on the specific circumstances of that area. Such claims cannot be general claims that more time is needed but rather should be specifically grounded in evidence of economic or technologic infeasibility.”⁴⁴

Moreover, contrary to any assertion that consideration of RACM or RACT is somehow optional for contributing sources, EPA has made clear that “all sources contributing to the nonattainment situation are required to implement restrictive available control measures even if it requires significant sacrifice.”⁴⁵ Indeed, EPA has consistently interpreted “contribute” to mean those sources that “sufficiently” contribute to nonattainment.⁴⁶

1. RACM

EPA has defined RACM as any potential control measure for application to point, area, on-road and non-road emission source categories that is: (1) technologically feasible; (2) economically feasible; (3) does not cause “substantial widespread and long-term adverse impacts”; (4) is not “absurd, unenforceable, or impracticable”; and (5) can advance the attainment date by at least one year.⁴⁷ However, in a situation such as this, where EPA is acting on the nonattainment SIP after the attainment date due to illegal delays by EPA and the Division, it would be an absurd result to consider the last factor.

2. RACT

RACT is a “technology-forcing” standard intended to ensure that polluting sources are controlled consistent with available methods for reducing pollution. As a result, RACT is a stringent standard, and is designed to induce and require improvements in control technology and reductions in pollutant emissions. Indeed, EPA has long maintained that “RACT should represent the toughest controls considering technological and economic feasibility that can be applied to a specific situation” and that “[a]nything less than this is by definition less than RACT.”⁴⁸

RACT is defined as “the lowest emissions limit that a particular source is capable of meeting by the application of control technology that is reasonably available considering

⁴⁴ Mem. from John S. Seitz, director of EPA’s Office of Air Quality Planning and Standards, to EPA regional air division directors (Nov. 2, 1999).

⁴⁵ Memorandum from Roger Strelow, Assistant Administrator for Air and Waste Management, U.S. EPA, to Regional Administrators, Regions I - X (Dec. 9, 1976), at 2 (hereinafter “Strelow Memo”).

⁴⁶ Cf. *See Catawba Cnty., N.C. v. EPA*, 571 F.3d 20, 39 (D.C. Cir. 2009) (upholding EPA’s decision to designate sources as being in nonattainment with the NAAQS where the source is contributing to an area with a violating monitor).

⁴⁷ 74 Fed. Reg. 2945 (Jan. 16, 2009).

⁴⁸ Strelow Memo at 2.

technological and economic feasibility.”⁴⁹ It comprises two parts: (a) technological feasibility and (b) economic feasibility.

“The technological feasibility of applying an emission reduction method to a particular source should consider the source’s process and operating procedures, raw materials, physical plant layout, and any other environmental impacts such as water pollution, waste disposal, and energy requirements.”⁵⁰

As EPA has explained, “[e]conomic feasibility considers the cost of reducing emissions and the difference in costs between the particular source and other similar sources that have implemented emission reduction.”⁵¹ More specifically, EPA presumes that:

[I]t is reasonable for similar sources to bear similar costs of emission reductions. Economic feasibility rests very little on the ability of a particular source to ‘afford’ to reduce emissions to the level of similar sources. Less efficient sources would be rewarded by having to bear lower emission reduction costs if affordability were given high consideration. Rather, economic feasibility for RACT purposes is largely determined by evidence that other sources in a source category have in fact applied the control technology in question.⁵²

EPA has further explained that RACT is not intended to enshrine existing installed control technologies, but rather is technology-forcing.⁵³ Accordingly, “[i]n determining RACT for an individual source or group of sources, the control agency, using the available guidance, should select the best available controls, *deviating from those controls only where local conditions are such that they cannot be applied there and imposing even tougher controls where conditions allow.*”⁵⁴

Moreover, in recent comments regarding Pennsylvania’s proposed RACT regulation for coal plants, EPA has clarified that the reason for installation of the control technology is not material and that states should look to more recent technical information, which “logically includes actual emission rates achieved in practice by sources that have installed controls in response to a settlement agreement or in response to state rules adopted in response to the NOx

⁴⁹ COMAR 26.11.01.01.B(40); accord U.S. EPA, State Implementation Plans; Nitrogen Oxides Supplement to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990, 57 Fed. Reg. 55,620, 55,624 (Nov. 25, 1992).

⁵⁰ U.S. EPA, State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990; Supplemental, 57 Fed. Reg. 18,070, 18,074 (Apr. 28, 1992).

⁵¹ 57 Fed. Reg. at 18,074.

⁵² *Id.*

⁵³ Strelow Memo at 2.

⁵⁴ Strelow Memo at 2 (emphasis added).

SIP Call or the CAIR (see for example, 40 CFR 51.121-51.124) as well as Federal Implementation Plans (FIPs) (40 CFR 52.35 and Part 97) and actions on section 126 petitions (40 CFR 52.34) promulgated as a consequence of these rules.”⁵⁵

While RACT and RACM overlap significantly and involve consideration of similar factors like technological and economic feasibility, there is a distinction. Advancing attainment of the area is not an explicit factor in evaluating RACT because the benefit of implementing RACT is presumed under the Clean Air Act.⁵⁶

As for RACT for the oil and gas sector, EPA states that the Division committed to testing protocol that apply to storage vessels and wet seal centrifugal compressors required to be controlled under the EPA’s oil and gas CTG. 87 Fed. Reg. at 67,632. But the Division did not live up that commitment. The Division did not submit a test protocol as part of the SIP. For this reason alone, EPA cannot approve the part of the oil and gas CTG RACT it is proposing to approve. Furthermore, the Division created a test protocol after submitting the SIP submittal which is not the same as the one EPA committed to submit. Ex. 13. Thus, EPA must disapprove this submittal and convert its conditional approval to a disapprove.

B. Natural Gas Compressors and Other Sources.

The electrification of natural gas compressors is a powerful tool to reduce ozone. *See* Ex. 18; *see also* Ex. 19. For example, in the Dallas Fort Worth nonattainment area, which is similar to the Front Range in that it is an urban area and also a major oil and gas basin, according to the TCEQ model, electrification of 50% of the 647 large compressors could have up to a 1 ppb impact on the DV-leading Denton monitor, and up to 2.2 ppb on the Eagle Mountain Lake site, with impacts over a 1 ppb reduction at five more monitors. Most of the region’s historically worst-performing monitors are impacted by 1ppb or more by this control measure.

⁵⁵ EPA Comments on Proposed Amendments to Chapters 121 and 129 Presumptive Reasonably Available Control Technology (RACT) requirements and RACT emission limitations for certain major stationary sources of oxides of nitrogen (NOx) and volatile organic compound (VOC) emissions. 44 Pa.B. 2392 (Apr. 19, 2014).

⁵⁶ TCEQ, App. A: Reasonably Available Control Technology Analysis. Houston-Galveston-Brazoria Reasonably Available Control Technology Analysis Update, State Implementation Plan Revision for the 1997 Eight-Hour Ozone Standard, Project No. 2010 028-SIP-NR (2011).

50% NO_x reduction from the Barnett Shale point sources

Maximum absolute difference of 8hr-mean O₃ predicted in 3x3 cells nearby CAMS (Scenario – FY18)

CAMS	Scenario D
	67-day episode
Eagle Mt. Lake - C75	2.2
Keller-C17	1.5
Ft. Worth Northwest-C13	1.5
Parker County - C76	1.2
Midlothian OFW - C52	1.1
Midlothian Tower - C94	1.1
Cleburne Airport - C77	1.1
Denton Airport South - C56	1.0
Granbury - C73	0.8
Itally/Ellis - C650	0.8
Grapevine - C70	0.7
Arlington - C61	0.7
Frisco - C31	0.6
Pilot Point - C1032	0.5
Dallas Exec. Airport - C402	0.4
Dallas North - C63	0.4
Kaufman - C71	0.3
Dallas Hinton St. - C401	0.3
Greenville - C1006	0.3
Rockwall - C69	0.2

100% electrification of the 647 large gas compressors would have up to a 3.3 ppb reduction in ozone levels at the Eagle Mountain Lake site, 2.2 ppb in both Keller and Ft. Worth Northwestern and 1 ppb or more at eight other sites. All of the region’s most stubborn monitors are impacted by this control measure.

100% NO_x reduction from the Barnett Shale point sources

Maximum absolute difference of 8hr-mean O₃ predicted in 3x3 cells nearby CAMS (Scenario – FY18)

CAMS	Scenario E
	67-day episode
Eagle Mt. Lake - C75	3.3
Keller-C17	2.2
Ft. Worth Northwest-C13	2.2
Parker County - C76	1.8
Denton Airport South - C56	1.4
Midlothian OFW - C52	1.4
Midlothian Tower - C94	1.4
Cleburne Airport - C77	1.3
Granbury - C73	1.0
Grapevine - C70	1.0
Itally/Ellis - C650	1.0
Frisco - C31	0.8
Arlington - C61	0.8
Pilot Point - C1032	0.7
Dallas North - C63	0.6
Dallas Exec. Airport - C402	0.5
Dallas Hinton St. - C401	0.4
Kaufman - C71	0.4
Greenville - C1006	0.4
Rockwall - C69	0.3

C. Cost of Compressor Electrification.

The Commentors contend electrification of compressors is a RACT measure first but can also be RACM. There is a prima facie case for it in the industry's own literature.

When considering the cost of electricity in the RACT analysis, EPA must consider that oil and gas companies could obtain very low prices wind power or solar power purchase agreements (PPAs) rather than purchase electricity at a retail rate.⁵⁷

RACT must be the most recent version of pneumatic controllers, not the one submitted in 2018 and 2019. *See* 87 Fed. Reg. at 67,628.

EPA explains that EPA only evaluated RACT for emission points at major sources that were over two tons per year of VOCs and five tons per year of NOx. 87 Fed. Reg. at 67,623. EPA cites no authority for ignoring emission points below these thresholds and there is none. *See* Alaska DEC. Furthermore, it is arbitrary and capricious to use tons per year thresholds to address the 2008 ozone NAAQS which has an 8-hour averaging time and a form based on the fourth highest 8-hour daily maximum. Furthermore, these thresholds are no enforceable.

EPA also uses a criterion of whether it could be implemented by May 1, 2020. 87 Fed. Reg. at 67,625. This is an arbitrary and capricious criterion because both Colorado and EPA illegally delayed submittal and final action on the submittal. EPA cannot justify failure based on failure. *See* page 67,631, column 3. This contains NOx emission limits for natural gas fired and refinery fuel gas fired process heaters.

At a minimum, there is no rational basis for why the refinery fuel gas process heater is 0.1 lb/mmbtu (as opposed to 0.09 lb/mmbtu for example) or is twice as high as the emission limit for natural gas fired process heaters. Also, there is no basis to not regulate process heaters below 5 mmbtu/hr.

D. Building Appliances.

EPA must disapprove the RACM element because it does not include regulations to reduce emissions from buildings. Fossil fuel appliances in Colorado's ozone nonattainment area counties emit more NOx than all of the counties' power plants or cement plants.⁵⁸ Appliance electrification will reduce building pollution and improve air quality.

⁵⁷ *See, e.g.*, <https://renewablesnow.com/news/edpr-signs-50-mw-wind-ppa-in-texas-613035/>.

⁵⁸ Emissions data from EPA 2017 National Emissions Inventory are available at <https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data>. The relevant parts are attached as Ex. 17. Appliance emission estimates include residential and commercial emissions for the gas, oil, and other fuel categories. Some commercial source classification codes have been excluded to avoid counting certain non-appliance sources like pipeline compressor stations and industrial-size boilers. All commercial nonpoint source emissions are included, and commercial point source emissions are included if they have input heat capacities less than 10 MMBtu/hr or if they are classified as space heaters.

Currently, Colorado's SIP fails to include point of sale rules that limit what kinds of residential water heaters and furnaces may be sold in the Front Range. However, other nonattainment areas, like Utah, Texas, and the South Coast and Bay Area Air Districts in California, do.⁵⁹ 87 Fed. Reg. 60,494, 60,509 (Oct. 5, 2022). Furthermore, the Division's RACM analysis does not offer a rational basis for rejecting a requirement of zero-emission electric furnaces and water heaters. *See* Ex. 14 at 19-20 (explain why such a requirement should be included).⁶⁰ EPA has recently proposed to find that failure to justify excluding electric furnaces and water heaters is a basis to disapprove a SIP element. 87 Fed. Reg. at 60,510-12. EPA cited recent action from the California Air Resources Board and Bay Area Air Quality Management District to pursue zero-emission standards for space and water heaters as part of the rationale for disapproval. It is insufficient for this Plan to fail to consider zero-emission appliances as a pathway to reduce ozone.

IX. EPA MUST DISAPPROVE THE RACT ELEMENTS AND REG. 7 PROVISIONS BECAUSE THEY ARE NOT FEDERALLY ENFORCEABLE AND NOT ENFORCEABLE AS A PRACTICAL MATTER

Reg. 21 and Reg. 7 are not enforceable because the compliance documents are maintained on the regulated entities private property to the which the public has no access or only must be submitted if the Division requests it. 87 Fed. Reg. at 67,629. While the Division can request these records, the public and EPA cannot not. The Clean Air Act provides for enforcement by the State, EPA, and any "person" as that term is used in 42 U.S.C. § 7604. Furthermore, 40 C.F.R. § 51.211 requires that the owners or operators must periodically report to the State.

Here, the SIP leaves the public, which is by far the most effective enforcement authority⁶¹, without a way to enforce Reg. 21 and Reg. 7. Thus, EPA must disapprove Reg. 21, Part A, Section IV; Part B, Section IV; and Reg. 7, Part E, Section V.A. 6, 7, and 8; and Part C, Section I.L.5 unless Colorado commits to fix these defects by ensuring the public has access to the required records, in which case EPA could issue a conditional approval. While EPA must disapprove these provisions, EPA can grant a limited approval and limited disapproval to ensure we get the pollution reductions from the rest of Reg. 21 and Reg. 7.

EPA must also disapprove Reg. 7, Part C, Section I.L.2.b.(i) because there is no testing to make the 90% or great control efficiency requirement enforceable. Thus, this provision is not enforceable.

⁵⁹ There is no meaningful distinction between BACM and RACM in this context.

⁶⁰ The relevant exhibits referenced in Ex. 14 are found in Ex. 15 and Ex. 16.

⁶¹ See Ex. 2 (finding that the Director of the APCD was granting enforcement discretion letters, meaning APCD was not going to take enforcement actions even though there were violations, to polluters that the Director formerly represented as a lawyer without disclosing this conflict of interest.) This person remains working at the APCD as the Deputy Director.

X. CONCLUSION

In conclusion, EPA must disapprove the attainment demonstration, contingency measures, nonattainment new source review, RACT, RACM, MVEB, and the parts of Reg. 7 discussed above. After the disapproval, EPA should very quickly promulgate a FIP that actually reduces ozone levels in the Front Range to below the 2008 ozone NAAQS.

Sincerely,

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