



March 17, 2015

Submitted via email A-and-R-Docket@epa.gov

The Honorable Gina McCarthy
Administrator
U.S. Environment Protection Agency

RE: Review of the National Ambient Air Quality Standards for Ozone Docket ID No. EPA-HQ-OAR-2008-0699

Dear Administrator McCarthy:

Western Energy Alliance respectfully requests the Environmental Protection Agency (EPA) to retain the current ozone National Ambient Air Quality Standard (NAAQS) at 75 parts per billion (ppb). We believe that current analysis by the EPA does not support any further reduction to the NAAQS standard and we are concerned about the harmful impact that EPA's recently proposed rule to make ozone standards more stringent could have on the economy and by extension, public health, particularly in rural areas of the West.

Western Energy Alliance represents over 450 companies engaged in all aspects of environmentally responsible exploration and production of oil and natural gas in the West. The Alliance represents independents, the majority of which are small businesses with an average of fifteen employees. The Alliance represents the voice of the western oil and natural gas industry and works closely with stakeholders across the region, including state and local governments, ranchers, and sportsmen's, civic, business, and other groups. These allies share an interest in a vibrant western economy with robust job creation based on environmentally sound practices.

We all value clean air, and oil and natural gas companies not only comply with current state and federal ozone requirements, but often commit to further controls for ozone precursor emissions in National Environmental Policy Act (NEPA) documents. Our members commit to such measures as installing low-bleed pneumatic devices, centralizing facilities, and reducing truck trips to reduce air emissions and in many cases, voluntarily control emissions to the levels that are over and beyond the regulatory requirement. The oil and natural gas industry developed reduced emissions completions (REC) technology that reduces emissions of Volatile Organic Compounds (VOC), and had been steadily increasing its use before a regulatory requirement was even imposed. In addition, Western Energy Alliance has been involved in supporting scientific studies in Utah's Uinta Basin to

address elevated winter ozone readings,¹ and with developing region-wide air emissions inventories with the Western Regional Air Partnership (WRAP), a program of the Western Governors' Association. These are just some examples of how the oil and natural gas industry voluntarily engages in efforts to improve air quality while also complying with regulations that will continue to result in a decline of ozone precursor emissions and further improvements in air quality. EPA NSPS/NESHAP rules for the oil and natural gas sector that went into effect in 2012 with full implementation this year are further reducing ozone precursors.

Western Energy Alliance disagrees with EPA's approach of not considering background levels when setting the standard. As we detail below, we believe the scientific justification is weak for a NAAQS below the current 75 ppb level. Furthermore, we believe the fact that current background levels in the West are near EPA's contemplated range of 60 – 70 ppb should prompt EPA to develop a different approach to the standard setting as well as implementation. The fact that natural levels combined with transport from outside the region mean a lower standard is unworkable, these major issues should not be left to the implementation stage. We stand with western states and Western States Air Resources Council (WESTAR) in our concern about background ozone levels in the West and the difficulties of complying with a lower ozone standard, particularly the cumbersome and unworkable exceptional events process. EPA should not just disregard these issues until a new standard is implemented. Rather, EPA should fundamentally work with western states to create processes that are workable and that won't damage western economies.

I. Proposed Standard is Not Necessary

A lowered NAAQS is not necessary as the country is on a path to further ozone reductions from regulations already on the books or planned in the short term as well as from improvements in technology. Nationwide, ozone-forming emissions have been cut in half since 1980, leading to a 33% drop in ozone concentrations. Moreover, EPA just updated ozone standards six years ago. Further, state and local governments have promulgated stringent rules to reduce VOCs in areas of high oil and natural gas development. These reductions will take time to have a meaningful effect on NAAQS and we request that EPA be patient to allow these changes to take a foothold to evaluate their efficacy on improving air quality prior to proposing further corrections. These current standards are behind schedule due to EPA effectively suspending their implementation from 2010-2012 while the Agency unsuccessfully pursued reconsideration. This country can expect to see even greater reductions in ground-level ozone as states make up lost ground in putting the current standards into effect.

Indeed, states are currently committing substantial resources towards achieving emissions reductions under the current ozone NAAQS. Yet despite over three decades of cleaner air

¹ [Final Report: 2014 Uinta Basin Winter Ozone Study](#), ENVIRON International Corp. for the Utah Division of Air Quality, February 2015.

and before states can catch up with EPA's delays in implementing existing ozone standards, EPA is now proposing a new stringent range of standards from 70 to 65 ppb that would bring vast swaths of the country into nonattainment. Specific areas in several states have struggled for decades to meet the current and past standards despite their best efforts to reduce ozone precursors. With an even lower standard, these areas will have to take extreme measures and will be at a competitive disadvantage.

The question also arises of why EPA is proposing such a large incremental lowering of the standard. Why not consider increments of 2.5 ppb instead of a large 5 ppb jump? Certainly lowering the standard to the 60 to 65 ppb is too aggressive of a strategy, as EPA acknowledges with this proposed rule, but given the economic consequences, 5 ppb should be considered ill-advised as well.

If finalized, EPA's proposed stringent ozone standards could limit business expansion in nearly every populated region of the United States and impair the ability of U.S. companies to create new jobs. EPA's proposed range would immediately add red tape to companies that are currently operating in and seeking to grow even in areas that can attain those standards. The Clean Air Act (CAA) carries even stiffer consequences for nonattainment areas, directly impacting economic vitality of local communities and making it difficult to attract and develop business. Increased costs associated with restrictive and expensive permit requirements would likely deter companies from siting new facilities in nonattainment areas, thereby making America a less attractive place to do business and increasing the risk of jobs being shipped overseas.

II. Background Ozone Levels

a. EPA Must Consider Western Background Ozone

Under the CAA, the NAAQS must be both "requisite" to protect public health and achievable by states and the state-regulated emission sources that bear the brunt of required emission reductions. A NAAQS that is set at a level that is physically unattainable even if all emissions of a particular pollutant in a state were to cease, and all domestic transported emissions contributing to nonattainment had been addressed, would hardly be "requisite" to protect public health. If a NAAQS is set below background levels it loses all rational meaning.

In many areas of the West, EPA's proposal, particularly if considering a new NAAQS at the lower end of the proposed range, is at or near the level of background ozone that is naturally occurring or internationally transported. A NAAQS below 70 ppb could push even rural counties without significant industrial activity into nonattainment, particularly at higher elevations. If the NAAQS is set at or near western background ozone levels, CAA mechanisms to obtain attainment for many rural counties become ineffective, and communities could be needlessly prevented from undertaking economic activities that create jobs and wealth for their citizens. In rural areas, options for offsets are often

lacking. At that point, the ozone NAAQS becomes a social justice issue, as very small environmental benefits are gained at the expense of denying local populations means of employment and threatening their livelihoods. Lack of employment also denies western communities tax revenue that supports important local services like public health and safety.

Where, as in the West, ozone has been declining steadily to levels approaching background² the Administrator bears a particular burden to demonstrate that further reductions are “requisite” and will contribute to protecting public health. One of the governing principles of the CAA is the *attainability* of the NAAQS.³ It is therefore incumbent upon EPA to fully consider the extent to which a particular level would make it possible (or impossible) to ever attain the standard through the available implementation tools.

In its 1997 review, EPA rejected a 70 ppb level because it recognized that level “would be closer to peak background levels that infrequently occur in some areas due to nonanthropogenic sources of O₃ precursors, and thus more likely to be inappropriately targeted in some areas on such sources.”⁴ That situation persists today. In fact, we have even more information that shows how western background ozone levels approach the 60-70 ppb levels contemplated by EPA. The Westwide Jumpstart Air Quality Modeling Study, a project of WRAP, with participation of EPA, state departments of environmental quality, and others, was completed in September of 2013. It shows very high levels of background ozone transported into the West from Asia, as well as naturally occurring ozone.

EPA’s own modeling shows that ozone levels in many western states are about 85% attributable to background. Rural areas show rates above 90% attributable to background. These high background rates, caused by stratospheric ozone intrusion, transport from Asia, and natural events such as wildfires, put the West at a severe disadvantage to the East, where background levels are much lower. This also indicates that the West is not creating a downwind problem for the East through transport. Economies of western states will disproportionately suffer from a lower ozone NAAQS. Rural western areas, particularly at higher elevations, will be especially harmed. EPA must put in place mechanisms to account for western background ozone levels and fix the problems of implementation for the states. In particular, the cumbersome red tape required by the exceptional event rule, as currently implemented, means regulators are spending time documenting regularly occurring events rather than engaging in more productive activities that actually result in improved air quality.

² See EPA ISA at 3-120 (“The median annual 4th highest 8-h daily max dropped from 80 ppb in 1998 to 71 ppb in 2010”).

³ CAA § 107(a); CAA § 110(a)(2)(C).

⁴ 62 Fed. Reg. 38,856,38,868 (July 18, 1997)

Because altitude amplifies the effects of ozone, in relation to both the primary and secondary standard, EPA must include provisions for monitor adjustments for ozone, as it has done for particulate matter. The geography and topography of the intermountain West often results in higher monitor readings based on meteorology and geography rather than an increase in locally controllable emissions. This is one of the biggest barriers for areas experiencing high winter ozone levels.⁵ Models have shown that even dramatic reductions of ozone precursor emissions do not lead to ambient air improvements and corresponding health benefits. EPA's proposed standard could make the West poorer while actually contributing to negative health impacts, as explained below.

b. Not Infrequent Events

The high levels of background ozone in the West are not “relatively infrequent” events, as asserted by EPA.⁶ Instead, background ozone is the predominant contributor to ambient ozone levels in states such as Utah, New Mexico, Colorado, and Wyoming, and if EPA lowers the standard to between 65 ppb and 70 ppb. These high background levels must be meaningfully considered as part of EPA's consideration of what level is “requisite” to protect public health—not as an afterthought to be addressed after an unattainable standard has been set.⁷ It would be arbitrary and capricious for EPA to finalize a NAAQS which does not expressly consider and account for background ozone in the West. Under the CAA, EPA must consider background ozone levels as an important aspect when reviewing the NAAQS.⁸

EPA is well aware of the implications of background ozone in the West, yet made the conscious decision to exclude background ozone from the standard-setting process.⁹ This change prompted CASAC to downplay the role of background in conducting risk assessments.¹⁰ EPA provides no rational explanation or justification for departing from its

⁵ “Variability and sources of surface ozone at rural sites in Nevada, USA: Results from two years of the Nevada Rural Ozone Initiative,” Fine et al, *Science of the Total Environment*, December 2014.

⁶ 79 Fed. Reg. at 75382. *See also id.* (noting that background ozone can be “significant in some areas on some days” and “may present a challenge to air agencies” preparing SIPs).

⁷ *Motor Vehicles Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983) (defining an action as arbitrary and capricious where an agency “entirely failed to consider an important aspect of the problem”); *Am. Farm Bureau Fed'n v. EPA*, 559 F.3d 512, 525 (D.C. Cir. 2009) (finding EPA action arbitrary and capricious where it “too hastily discounted” relevant information); *see also North Carolina v. EPA*, 531 F.3d 896, 906 (D.C. Cir. 2008) (citing *State Farm* in remanding Clean Air Interstate Rule because EPA inappropriately aggregated emissions reductions at regional level instead of at individual state level in creating rule); *Nat'l Ass'n of Clean Water Agencies v. EPA*, 734 F.3d 1115, 1147 (D.C. Cir. 2013) (agency must support assumptions on which it relies in reaching its decision in a rulemaking).

⁸ *Motor Vehicles Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983).

⁹ EPA Policy Assessment for the Review of the Ozone National Ambient Air Quality Standards Second External Review Draft 2–11 (Jan. 2014) (EPA PA Draft 2).

¹⁰ CASAC Review of EPA's Second Draft Policy Assessment, Letter to Gina McCarthy, June 26, 2014, at 31.

prior methodology in a way that minimizes the potential differences in health effects resulting from exposure to background, which is critical to assessing whether a standard that approaches background is “requisite” to protect public health. Explanations for such material changes have been required by several federal courts.¹¹

A study published in the *Journal of Geophysical Research* finds that Asian pollution contributes as much as 20 percent of total ozone in the West, particularly in rural areas.¹² The authors also found that 53% of instances where the 75 ppb limit was exceeded would not have occurred without the contribution of Asian air pollution. EPA could cause human activities to practically cease in rural areas of the West and they would still experience high levels of ozone. Ironically, putting in place an expensive ozone NAAQS in the 60-70 ppb range could cause additional dislocation of American industry to Asia, further contributing to ozone pollution in the West. While it is nearly impossible to quantify how much EPA regulation has already contributed to companies relocating to Asia and other overseas locations, EPA should be mindful of such unintended consequences.

Rather than treating frequent ozone intrusions and wildfires as exceptional events, EPA should recognize that these are common occurrences. Rather than requiring state regulators to engage in onerous paperwork exercises to document exceptional events, EPA should fix implementation problems for western states. If a lower ozone NAAQS is implemented, which we believe should not be the case, EPA must consider making mechanisms such as exceptional event, rural transport area, and international border area provisions more workable for western states.

EPA’s insistence that existing tools are sufficient to deal with the influence of background has no basis in history and does almost nothing to prevent an unwarranted nonattainment designation based on background conditions. EPA insists that while background “may present a challenge to air agencies in preparing clean air plans,” these events are “relatively infrequent and the CAA contains provisions that can be used to help deal with certain events, including providing varying degrees of regulatory relief for air agencies and potential regulated entities.”¹³ This so-called regulatory relief comes from three rarely

¹¹ See, e.g., *Catawba Cty. v. EPA*, 571 F.3d 20, 52 (D.C. Cir. 2009) (rejecting EPA’s changing rationale to support unchanging data); cf. *Am. Petroleum Inst.*, 684 F.3d at 428 (upholding EPA action as not arbitrary and capricious where EPA justified its change to the NOx NAAQS upon comparing benefits of changed standard against several scenarios); see also *Portland Cement Ass’n v. EPA*, 665 F.3d 177, 188 (D.C. Cir. 2011) (agency “simultaneously in control of both defining the universe of relevant data and of applying that data to a given rulemaking . . . cannot allow itself to do the latter without already having done the former”).

¹² [“Transport of Asian ozone pollution into surface air over the western United States in spring,”](#) Meiyun Lin et al., *Journal of Geophysical Research*, November 2012.

¹³ 79 Fed. Reg. at 75382.

used provisions of the CAA: exceptional events,¹⁴ international border areas,¹⁵ and rural transport areas.¹⁶

Of the three options, only the exceptional events provision could theoretically allow a state to avoid a nonattainment designation. However, this provision is of little use in addressing background ozone, and over the last eight years EPA lists only three approvals of state applications to exclude ozone monitoring exceedances resulting from exceptional events. The remaining two provisions are rarely used and would provide relief in name only because states could not avoid a nonattainment designation with its attendant costs and regulatory restrictions for both states and regulated industry. EPA cannot avoid the difficult task of addressing background ozone during the standard-setting process by kicking the proverbial can down the road and shifting to the states the burden of managing what is an insurmountable barrier to attainment.

The problem with EPA's exceptional events policy is summarized by Daniel Jacob, a professor of atmospheric chemistry at Harvard University:

"If you have a standard that's somewhere between 60 and 70 parts per billion, you're not talking about events anymore. You're talking about the routine. You're talking about things that happen rather frequently. The events are not exceptional anymore. And at that point, I think the system is going to break."¹⁷

Neither the international border areas provision nor the rural transport provision enable an area to avoid an initial nonattainment designation or even to reduce the initial classification level. Further complicating these purported relief valves, states face a significant burden to demonstrate these exceptions. As with the exceptional events, states have made very few successful demonstrations, and none in the case of rural transport. Despite the limited scope of the relief, the limited practical use of the provision, and the lack of uniform guidance, EPA now points to these provisions as legitimate relief valves for background ozone across the country.¹⁸

Based on the lack of appropriate existing mechanisms to address high background levels, if EPA does not agree to retain the existing ozone NAAQS, EPA should develop a practical pre-designation method that takes into consideration exceptional events and international transport before a designation is made. Additional relief measure should be developed for rural areas with few or no options for offsets or major sources of emissions. Because states should not be responsible for emissions beyond their control, taking these factors into account before a designation is the only way to provide real relief, especially to areas

¹⁴ CAA § 319(b).

¹⁵ CAA § 179B.

¹⁶ CAA § 182(h).

¹⁷ *Regulators squirm as good ozone breaks bad*, Greenwire, Nov. 17, 2014.

¹⁸ 79 Fed. Reg. at 75382-83.

where the factors of high background, altitude, and rural or remote locations converge, like the intermountain West. As discussed, determining what is “requisite” to protect the “public health” with an “adequate” margin of safety includes contextual considerations and evaluations of acceptable or unavoidable risk.¹⁹

c. Disadvantaging Rural Areas

Rural areas throughout the intermountain West face compounding barriers to attaining the proposed NAAQS: (1) non-U.S. emissions disproportionately contribute to high ozone events in these areas while (2) emission reductions from domestic urban areas provide very little benefit. A large portion of Alliance members’ operations are located in these rural western areas and will thus be subject to impossible attainment scenarios. As discussed above, although EPA and peer-reviewed studies acknowledge that background will be a key cause of nonattainment designations and whether attainment is even conceivable, EPA misinterprets the CAA to excuse itself from considering West background as a relevant factor when setting the NAAQS. However, background levels in the West are inextricably linked with attainability of the NAAQS. A recent scientific study recognizes that these levels will have direct bearing on whether the proposed ozone NAAQS is achievable in this region, showing that a NAAQS in the 60-70 ppb range means that areas of the intermountain West will have little or no ability to reach compliance through regulatory controls.²⁰

Amplifying the problem of high background levels, remote rural areas in the intermountain West are much less likely to see the benefits of domestic emission reductions.²¹ Because these rural areas often have no major sources of ozone precursors, the areas designated nonattainment will be unable to avail themselves of the tools provided by the CAA to continue to function and grow while under the nonattainment designation. EPA has also proposed increasing state monitor requirements in rural areas, including national parks and other areas on federal lands.²² EPA’s proposed approach will likely have the major consequence of increasing the number and size of areas in the West susceptible to nonattainment designations that can never be overcome due to high background levels and no anthropogenic sources to control or offset.

Many rural areas in the western U.S. are already struggling to preserve economic development and employment opportunities. Development restrictions and delays imposed on oil and natural gas operations in these areas by a nonattainment designation

¹⁹ See *Whitman*, 531 U.S. at 494–95, 121 S.Ct. 903 (Breyer, J., concurring in part and concurring in the judgment); *Mississippi v. E.P.A.*, 744 F.3d 1334, 1343 (D.C. Cir. 2013) cert. denied sub nom. *Util. Air Regulatory Grp. v. E.P.A.*, 135 S. Ct. 53, 190 L. Ed. 2d 30 (2014).

²⁰ Zhang et al, at 6773-74.

²¹ Cooper et al 2012.

²² 74 Fed. Reg. 34525, 34530-31.

for emissions that are beyond their control will place severe strain on economic development and the social infrastructure in these areas.²³

In addition, some rural areas in the West experience elevated levels of ozone under specific weather conditions (temperature inversion with snow cover) during the winter. Western Energy Alliance has been a leader in supporting scientific research to understand winter ozone, which is formed from different chemical reactions that are very different from the urban, summer ozone that EPA and most scientific efforts have focused on for decades. Impacts to winter ozone from background are not yet well understood. The contribution from background ozone has not yet been isolated to understand how it impacts the process.

Winter ozone results from very different photochemical phenomena than traditional summer ozone. While summer ozone has been widely monitored and studied, scientists are still wrestling to determine the exact causes of winter ozone, which appears to result from a different mix of NO_x and VOC precursors.²⁴ Such winter episodes have occurred in the Uinta Basin of Utah and the Upper Green River Basin of Wyoming. While numerous studies have been conducted, with the support and participation of Western Energy Alliance members, more science is needed to fully understand both the formation of winter ozone and how it responds to specific emission reductions to find the best ways to address the complex and non-linear reactions of the two principal precursors. This is a significant but necessary challenge to develop effective ozone pollution management. The one-size fits all approach of the proposed ozone standard may not be effective or possible in these areas.

III. Impact on Energy Development

Nonattainment in the West will likely have more impacts on energy development than EPA suggests. EPA asserts an overly optimistic situation in claiming that all of these western background ozone issues can be overcome by strengthening existing implementation tools and expanding “good neighbor” policies. EPA’s optimism is not, however, well founded. First, more areas are likely to be nonattainment than indicated by EPA data and maps issued with the proposed rule. Second, nonattainment areas are likely to be much larger than average, impacting areas that may be significantly removed from the ozone monitors. Finally, the geography and topography of the intermountain West often results in higher monitor readings based on meteorology rather than an increase in locally controllable emissions.

²³ See Brown et al, 2013, finding natural gas development associated with a 12-percent increase in total employment over 8 years; Rural America at a Glance, 2014 Edition (contrasting positive employment growth in rural areas with oil and gas development against general rural trends of decreasing or stagnant employment).

²⁴ [High winter ozone pollution from carbonyl photolysis in an oil and gas basin](#), Edwards et al., October 16, 2014.

For example, in Utah recently certified monitors in the Uinta Basin that are not listed on EPA's map indicate exceedances of the current standard. In addition, EPA does not include tribal or federal land monitors in the spreadsheet, and data from these sites indicate that several additional sites would be nonattainment under the reduced standards. Instead of the five sites identified as nonattainment at 70 ppb in EPA's 2011-2013 map, data through 2014 including new monitors and national parks indicate fourteen sites surpass 70 ppb.

Wyoming has an existing nonattainment area, and while ozone levels have not surpassed the current 75 ppb standard since the designation was made, Wyoming has seen a decline in energy project approvals since the Upper Green River Basin was designated nonattainment. Much of the decline is caused by regulatory uncertainty, including leasing and permitting delays for projects on public lands due to the lack of established procedures for federal agencies to demonstrate general conformity, as required in nonattainment areas.

A report prepared for La Plata County in Colorado found that there are "[e]ssentially no cost effective viable options for La Plata County to unilaterally implement" if the NAAQS is lowered.²⁵ These specific examples illustrate that EPA has downplayed both the number of areas that will be impacted by the proposed NAAQS and impacts that a nonattainment designation in the rural Intermountain West will have on energy development. These are key issues related to energy effects that should have been included in CASAC's advice to EPA as part of its statutory duties.²⁶

IV. Unintended Public Health Consequences

Scientific uncertainties regarding the benefits of more stringent ozone standards have increased. Indeed, stringent ozone standards may have severe unintended consequences for public health. Studies show that by increasing the costs of goods and services such as energy and decreasing disposable incomes, regulation can inadvertently harm the socio-economic status of individuals and thereby contribute to poor health and premature death.

The overwhelming body of scientific evidence indicates that lowering the current ozone standard will not provide added health benefits beyond those achieved with the current standard. There have been hundreds of scientific studies on ozone exposure and possible health effects. However, EPA has not conducted a "weight-of-evidence" evaluation of them in a systematic, consistent manner. By cherry-picking the studies it relies on, EPA has exaggerated the health risks of ozone levels below the 75 ppb standard. As a regulatory agency, EPA has a built-in bias to focus on studies support more regulation and ignore those that do not. In order to guard against that bias and ensure the decision is based on

²⁵ *Final Report: La Plata County, Review of Four Corners Air Quality Task Force Report of Mitigation Options*, March 2010.

²⁶ CAA § 109(d)(2)(C)(iv).

the best-available science, not just the best selection of science that fits a preordained narrative, EPA must go back to the drawing board and reassess the science on health effects.

To guard against that bias, EPA should fully release its scientific assessments and the data those assessments are based on so that the public can determine the quality of its scientific information. Good science requires transparency of data and reproducibility of results. Without transparency, the public cannot assess if EPA's health claims are legitimate, or the result of a few poorly conducted science that are not reproducible. These basic scientific tenets are further enshrined in federal law and Presidential directives, yet EPA refuses to make all its data and studies public. Congress has repeatedly tried to compel the release of data, but continues to be stonewalled by EPA.²⁷ The question arises of why EPA is not being transparent. Are the health claims for ozone unable to stand the rigors of public scrutiny? Without that transparency, the ozone NAAQS cannot legitimately be changed.

One major flaw is that most studies examining connections between ozone and health effects do not adequately account for smoking or other factors such as diet and exercise that could contribute to diseases or mortality attributed to ozone. By not fully considering these other factors, the EPA assumes that ozone causes more health effects than what the science supports.

EPA has interpreted some studies to indicate that ozone is more harmful than it likely is. For example, Dr. William C. Adams, professor emeritus at the University of California, Davis, published a peer-reviewed paper in 2006 finding no statistical difference in lung function in humans exposed to 80 ppb compared to 60 ppb ozone exposures when exercising for six hours. However, EPA misinterpreted his study and determined that it showed harmful effects. Dr. Adams later said on the EPA Docket for public comment that the "EPA has misinterpreted the statistics contained in my published, peer-reviewed paper."²⁸ Research published in the *American Journal of Respiratory and Critical Care Medicine* also found no statistical difference in lung function at 60 ppb compared to higher levels. EPA shouldn't lower the ozone NAAQS unless there is solid evidence that doing so would result in measurable improvements to health.

The Texas Commission on Environmental Quality conducted a rigorous review of EPA's analysis of the scientific literature supporting a change to the ozone NAAQS, and

²⁷ For example, the U.S. House Science, Space and Technology Committee has issued a [subpoena](#) for the data from studies EPA uses as the basis for the ozone NAAQS and other air quality regulation. This is the first subpoena in the last 21 years of the committee's history, yet EPA has ignored it and has not released the data. The excuse that the data cannot be made public for privacy issues rings hollow, as health study data are routinely released publicly by simply redacting any personal information from study subjects.

²⁸ [The Dubious Benefits of Further Ozone Reductions](#), Drs. Julie E. Goodman and Sonja Sax, Wall Street Journal, May 11, 2014.

determined that there would be little to no public health benefit in lowering the current standard. TCEQ points out that EPA's own modeling indicates there would be *increased* mortality in some areas, a counterintuitive result that indicates EPA is interpreting the data incorrectly.²⁹ Yet EPA is not forthcoming about the data, and buries these conclusions in its 597 page analysis. What is EPA hiding? The subterfuge and lack of transparency indicates that there is not sufficient health data to support a change in the standard.

Furthermore, other scientific studies that EPA ignores shows a lowered NAAQS could actually worsen public health. EPA routinely cites asthma as a justification for stricter ozone standards. However, there is new evidence that poverty and indoor air pollution are greater contributors to asthma rates than outdoor air pollution. Dr. Corrine Keet et al. conducted a study of over 23,000 children and found no statistical difference between rates of asthma for children in higher-pollution areas of inner-cities versus other children, after controlling for other factors. The research team concluded that poverty is a better predictor of higher asthma rates than outdoor air pollution and hence, ozone levels. The Keet study also points to indoor air pollution, particularly second-hand smoke, mold, pest allergens, etc., as a greater factor than outdoor air pollution.

Since the lowered ozone NAAQS would cost society \$90 billion, according to EPA estimates, the increased poverty resulting could very well be more decisive than the supposed benefits from delayed deaths or fewer asthma incidents, as EPA claims. Furthermore, the cost of the regulation is likely much higher than EPA claims and the benefits much less, the resulting poverty could actually result in lower public health than by leaving the standard alone.

In fact, NERA Economic Consulting finds that lowering the standard to 65 ppb will reduce U.S. GDP by \$140 billion annually, and result in 1.4 million fewer jobs, costing the average household \$830 annually.³⁰ This is not just a cost that is born just by industry. The cost to society touches every American, and will lead to higher poverty rates and decreased public health. Combined with the results of the Keet study, the lowered ozone standard is more likely to lead to worse public health outcomes than what EPA claims.

V. EPA's Benefits Analysis is Not Believable

EPA justifies lowering the ozone standard to 70 ppb, claiming net benefits are as high as \$23 billion. This claim is 3,100 percent higher than the benefit claims of \$700 million in EPA's 2011 analysis. Without providing any new information, EPA suddenly claims a vastly increased benefit. Without supporting data, this claim should be removed, and EPA should recognize that lowering the NAAQS will result in a huge cost to society. That cost, as

²⁹ [Will EPA's Proposed New Ozone Standards Provide Measurable Health Benefits?](#), Dr. Michael Honeycutt, October 2014.

³⁰ [Economic Impacts of a 65 ppb National Ambient Air Quality Standard for Ozone](#), NERA Economic Consulting for the National Association of Manufacturers, February 2015.

discussed above, is more likely to result in a worsening state of public health than if the standard is left at the current 75 ppb level.

EPA justifies its new cost-benefit analysis by claiming in its “Ozone and Health” fact sheet that it has examined “thousands of scientific studies” before proposing the rule, but that claim is not actually supported in the final Health Risk and Exposure Assessment for Ozone, published in August 2014.³¹ There are 263 reports listed in the reference section. The vast majority of them were published before the 2011 report that contained the \$700 million benefit estimate. Therefore, EPA is clearly not forthcoming why its cost-benefit analysis shows a 3,100 percent increase nor its health benefit claims. Policy of this cost and magnitude should not be based on such faulty information.

Furthermore, when looking at the clinical studies cited by EPA’s Clean Air Scientific Advisory Committee (CASAC) in support of a 60 ppb standard, all were created by EPA. Non-EPA literature cited by CASAC does not support a 60 ppb standard. EPA relying on its own research to justify its rules clearly displays a self-reinforcing bias in favor of more regulation, despite independent studies that do not support that conclusion. The bias clearly discounts EPA’s health benefit claims, and further argues against a NAAQS set near 60 ppb.

VI. EPA Must Respect the System of Cooperative Federalism

Under the CAA’s system of cooperative federalism, EPA cannot promulgate a NAAQS that states are powerless to implement. The CAA requires EPA to set a NAAQS that can be achieved through targeted reductions in national emissions required through a state-administered plan. The CAA did not contemplate a NAAQS that could only be attained through non-domestic emission reductions that are beyond the jurisdiction of either EPA or the states. Even though the statute requires a national standard to govern national emissions, EPA presumes, without explaining or justifying the presumption, that the subject emissions do not have to be national emissions.³² The emissions sources that create background levels at or near the proposed NAAQS in many areas of the West are not subject to control by either the states or the federal government through their statutory and regulatory authority. Because the proposed rule sets an unachievable mandate for a very significant portion of the U.S, the proposed NAAQS exceeds both explicit and implicit authority granted to EPA by the CAA.

Because of the disproportionate impact on rural and elevated areas in the intermountain West from non-domestic emissions, requiring states to implement a NAAQS that is unachievable does not accord with the federal-state partnership established by Congress

³¹ [Health Risk and Exposure Assessment for Ozone: Final Report](#), EPA, August 2014.

³² Proposed Rule at 75242 (“However, the CAA requires the EPA to set the NAAQS at levels requisite to protect public health and welfare **without regard to the source** of the pollutant.” Purporting to cite *API*, 665 F. 2d at 1185–86, which does not discuss the national location of the source emissions).

in the CAA. In addition, because the background level will put severe constraints on new and developing industry while rendering unavailable the CAA tools to accommodate growth within such constraints, the proposed ozone NAAQS would give EPA de facto land use authority in rural nonattainment areas in the West, which is explicitly prohibited by the CAA.

An unattainable NAAQS has the additional problem that it results in a de facto federal land use mandate. If EPA does not take background levels of ozone in the West into account when setting the NAAQS, then state and local governments will be unable to avail themselves of the tools provided by the CAA to continue to function and grow under a nonattainment designation. Non-domestic emissions have a disproportionately negative impact on the West and rural areas in particular. In addition, these emissions are increasing each year.³³ The increased contribution from international emissions to the background equation results in an ever-diminishing gap between background ozone levels and the existing standard.

Congress did not mean for the NAAQS to be set at background levels.³⁴ This frustrates the states' ability to perform their nondiscretionary duty to implement the NAAQS set by EPA.³⁵ The practical effect of EPA translates into de facto federal control over land use authority. This is especially true for rural areas with no access to offsets or large sources of emission reductions. Nonattainment will severely constrain local governments' existing authority to adopt and implement their desired land use plans. This result undermines the CAA, which expressly preserves local authority over land use.³⁶ Legislative history illustrates congressional concerns regarding the 10th amendment implications of such interference:

“By forcing a regulatory scheme in the States with regard to economic growth, Congress is overriding a local function reserved to the States under the 10th amendment [T]he respective State no longer would have ultimate authority over their land-use policies, but would be acting within the dubious constraints of a Federal imperative uniformly applied without regard to the peculiar needs and desires of the several States.”³⁷

EPA's promulgation of a NAAQS that is impossible to meet, without consideration of rural and background issues in the West, will result in de facto land use regulation, which is clearly proscribed by the CAA and congressional intent.

³³ See, e.g., Jacob et al., 1999; Zhang et al., 2008; Lin 2010; Zhang et al 2011; Cooper et al 2012; LeFohn et al 2014.

³⁴ H.R. Rep. No. 294, 95th Cong., 1st Sess. 127 (1977).

³⁵ CAA § 110(a)(2)(C).

³⁶ CAA § 131.

³⁷ *Id.* at 504–05.

Western Energy Alliance Comments on the Ozone NAAQS
EPA-HQ-OAR-2008-0699
March 17, 2015
Page 15 of 15

The air is getting cleaner, and current ozone standards need an opportunity to work. Setting a standard at or near western background ozone levels will disadvantage the West. In light of the economic hardship of a new ozone NAAQS without a clear public health benefit, Western Energy Alliance calls on EPA to retain the existing ozone standards in the final rule.

Sincerely,



Kathleen M. Sgamma
Vice President of Government & Public Affairs