



**American  
Forest & Paper  
Association**

March 22, 2009

Environmental Protection Agency  
EPA Docket Center (EPA/DC)  
EPA West (Air Docket)  
Mailcode 6102T  
Attention Docket ID No. EPA-HQ-OAR-2005-0172  
1200 Pennsylvania Avenue, NW.  
Washington, DC 20460

Re: Comments on Proposed National Ambient Air Quality Standards for  
Ozone, Docket ID No. EPA-HQ-OAR-2005-0172

Dear Sir or Madam:

I am writing to offer the comments of the American Forest & Paper Association (AF&PA) and American Wood Council (AWC) on EPA's proposal to revise the primary and secondary National Ambient Air Quality Standards (NAAQS) for ozone, as published on January 19, 2010, 75 Fed. Reg. 2938 (the "proposed ozone NAAQS"). This proposal arises from EPA's reconsideration of ozone NAAQS that it set in March 2008 and which have only begun to be implemented.

AF&PA is the national trade association of the forest, pulp, paper, paperboard, and wood products industry. The U.S. forest products industry accounts for approximately 6 percent of the total U.S. manufacturing, placing it roughly on par with the automotive and plastics industries. The forest products industry generates over \$200 billion a year in sales and employs approximately one million people earning \$50 billion in annual payroll. The industry is among the top ten manufacturing sector employers in 48 states. We support policy efforts to increase our nation's energy security, and our member companies are leading the effort to achieve this objective by combining advanced technology and innovative manufacturing practices with responsible stewardship of our nation's natural resources.

AWC is the voice of North American traditional and engineered wood products, representing over 60% of the industry. From a renewable resource that absorbs and sequesters carbon, the wood products industry makes products that are essential to everyday life. AWC's engineers, technologists, scientists, and building code experts develop state-of-the-art engineering data, technology, and standards on structural wood products for use by design professionals, building officials, and wood products manufacturers, to assure the safe and efficient design and use of wood structural components. AWC also provides technical, legal, and economic information on wood design, green building, and manufacturing environmental

regulations advocating for balanced Federal policies that sustain the wood products industry.

AF&PA's and AWC's members operate facilities whose emissions are subject to regulation under the Clean Air Act ("CAA"); in fact, CAA compliance often represents a significant portion of operating costs at those facilities. In addition, AF&PA and AWC members' facilities use large amounts of purchased electricity (although they also generate much of their own electricity), and so their costs are indirectly affected by CAA regulations that impose costs on electric power companies. And since transportation costs for raw materials like wood chips and chemicals and delivery costs for products like paper and plywood are a significant portion of AF&PA and AWC's members' raw material costs and of the final cost to purchasers of their products, CAA regulations that increase transportation costs or interfere with highway construction can have an important impact on AF&PA and AWC members as well.

### **Overview**

AF&PA and AWC support measures necessary to avoid real health risks from air pollution. The ozone NAAQS EPA has proposed, however, reflect an unreasonably over-protective methodology applied to the data. "Reconsidering" the current ozone NAAQS less than two years after they were promulgated (which tightened the 1997 standards) is inappropriate. The present 2008 standard is significantly more stringent than the 1997 standard. This "reconsideration" short-circuits the five-year review cycle Congress established, gives inappropriate significance to an advisory committee, skips over statutorily required procedures, and actually has an adverse effect on air quality by de-railing implementation of the current ozone NAAQS.

EPA cannot reliably predict how many areas of the country would be determined to be in nonattainment with the proposed ozone NAAQS in combination with revised ambient monitoring requirements, and therefore what economic burden adopting the proposed standard would impose on the nation. EPA and its consultants do not know how the standard could ever be attained in many areas, using known emission controls, and so the economic impacts EPA does predict are hopeful projections rather than reliable estimates. Even at that, the projected costs would make the proposed ozone NAAQS a huge burden on society, and the benefits EPA can project are not clearly greater than, and may be less than, EPA's projected costs. Additionally, EPA has given no consideration to the ways in which the proposed ozone NAAQS would cause increased greenhouse gas emissions and would impact energy demand and prices.

Ambient ozone concentrations in the United States already have dropped substantially over the past 40 years, while the population and economy have grown.

Ambient ozone definitely will continue to decrease, as a result of implementation of the 1997 ozone NAAQS (not yet completed) and implementation of the 2008 ozone NAAQS (not yet started) as well as numerous other regulatory programs already in place or in progress. At a time when the economy is reeling from a deep and long recession, and EPA recently has imposed or is proposing to impose several other very costly air pollution regulations, EPA would not be justified in imposing a new ozone NAAQS that is based on highly conservative assumptions and that would impose severe economic burdens whose real extent has not even been estimated. Simply put, EPA has not yet assembled the information necessary to conclude that the proposed ozone NAAQS is required in order to protect human health or that the margin of safety EPA has applied is appropriate in the (not yet fully evaluated) context. EPA should evaluate the results of implementation of existing NAAQS and other regulations, as well as improved ambient monitoring, before revising the ozone NAAQS yet again.

### **The Reconsideration Procedure EPA Is Following Is Inappropriate.**

The ozone NAAQS and the measures to implement the standards have been in flux since 1997 (when EPA replaced the one-hour average standard with an eight-hour standard). Since that time, state agencies, municipal planners, and industry have had to aim for an ever-changing target, constantly facing new standards and new requirements before the existing ones had been implemented (or achieved). EPA now has unnecessarily and improperly added to that confusing process with its “reconsideration” of the standards legally adopted in 2008.

The Clean Air Act establishes a clear process for reviewing and revising NAAQS over a five-year period. EPA’s proposed revised ozone NAAQS bypass that statutorily mandated process. EPA has not prepared a criteria document and issued it simultaneously with the proposed criteria, as required by CAA sections 108(a) and (c) and 109(a)(2), (b), and (d)(1). Nor has a new criteria document been submitted for review by EPA’s Clean Air Scientific Advisory Committee (CASAC), as required by Clean Air Act section 109(d)(2). EPA’s extensive reliance in the preamble to the proposed rule on the “2007 Staff Paper” on points not addressed or supported by the Criteria Document also circumvents the procedure established in the statute. Moreover, the proposed new ozone NAAQS are based on new value judgments from pre-2007 scientific data, rather than being based on the latest scientific information as the Clean Air Act requires.

EPA’s decision to reconsider the 2008 ozone NAAQS, and the proposed rule, appears to be based primarily on the judgment exercised by former Administrator Johnson to have agreed with and adopted in the 2008 final rule which considered, but conflicted with the recommendations of CASAC. The American Lung Association, Environmental Defense, and Sierra Club have asserted that the Administrator was essentially required to defer to CASAC’s recommendation that

the primary standard be set within the 0.060 to 0.070 ppm range. This is not what the Clean Air Act requires. (In fact, if the Clean Air Act did require that, it likely would be an unconstitutional delegation of rulemaking authority to that body.) To the contrary, the statute does not require any such deference to CASAC. “The Act requires only that EPA submit the criteria document to the [SAB] for advice and comment; it does not require that the Administrator obtain approval of the SAB or incorporate all suggested changes.” *American Petroleum Institute v. Costle*, 665 F.2d 1176, 1188 (D.C. Cir. 1981), *cert. denied*, 455 U.S. 1034 (1982).<sup>1</sup>

CASAC is not even an appropriate body to make the kinds of judgments that have to be made in weighing all of the relevant factors to determine the “requisite” level of ozone to protect public health is an “adequate” margin of safety. As discussed elsewhere in these comments, establishing NAAQS necessarily involves weighing numerous factors. Those determinations are the responsibility of the Administration, not by an advisory board. There also may be issues of practical implementation (such as the form of the standard) that are within the expertise of EPA, not CASAC.

EPA also suggests in the preamble to the proposed rule that it is significant that CASAC members sent a letter urging reconsideration of the ozone NAAQS after they were adopted in 2008, emphasizing in the preamble to the proposed rule the “CASAC advice following [the] 2008 decision.” 75 Fed. Reg. 2992-93, 3017-18. There is no statutory provision for the issuance of such “advice” or for EPA’s (partial) reliance on it. That kind of advocacy is not appropriate for the role Congress established for CASAC in CAA section 109(d). As such, it would be improper for EPA to rely in any way on that CASAC advocacy as justification for revising the ozone NAAQS.

Establishing new NAAQS now, even though EPA frames its action as a “reconsideration,” would violate numerous provisions of the Clean Air Act. EPA’s decision to base its reconsideration of the 2008 final rule “on the scientific and technical information and analysis on which the March 2008 O<sub>3</sub> NAAQS rulemaking was based,” 75 Fed. Reg. at 2940, fails to comply with the requirement of CAA section 108(a)(2) that air quality criteria, and therefore NAAQS, “accurately reflect the latest scientific knowledge. Even if EPA had not indicated explicitly that the proposal was based on the scientific data (up through 2006) analyzed for the 2008 ozone standards, EPA could not rely on the fact that EPA’s Office of Research and Development “conducted a *provisional* assessment of ‘new’ scientific papers (EPA, 2009) of scientific literature evaluating health and ecological effects of O<sub>3</sub> exposure published since the close of the 2006 Criteria Documentation upon which the 2008

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<sup>1</sup> Note also that because of environmental groups’ insistence that CASAC’s recommendations are virtually binding on EPA, they would be effectively stopped from arguing against a revised standard that EPA set at the upper bound of the range CASAC recommended, i.e. 0.070 ppm.

O<sub>3</sub> NAAQS were based,” 75 Fed. Reg. at 2044 (emphasis added). That analysis was admittedly incomplete, and obviously it was not reviewed by CASAC as CAA section 109(d) requires. Promulgation of revised ozone NAAQS under those circumstances would be unlawful.<sup>2</sup>

The “reconsideration” approach EPA is using is particularly inappropriate with respect to the proposed secondary standard. There, EPA is proposing a new form for the secondary standard which, combined with a new initiative to locate ambient monitors in rural areas, will completely change the way states have to evaluate attainment and prepare SIPs for the secondary standard. (EPA has as much as acknowledged this in suggesting that a more-extended implementation schedule may be appropriate for the secondary standard than for the primary standard.) Moreover, to an even greater extent than for the primary standard, the determination of a secondary standard requires weighing of a large number of factors besides just scientific data on the effect on certain plants of various concentrations of ozone (as explained further below). Reversing EPA’s “robust” evaluation of those various factors in the 2008 rulemaking (see 75 Fed. Reg. at 3017) with a new conclusion through an abbreviated “reconsideration” process is unjustified.

Moreover, EPA has not even attempted a Regulatory Impact Analysis for a secondary ozone standard up until now (and still has not really attempted one, as discussed below), because in the past the secondary standard has been equivalent to the primary standard. See Supplemental Regulatory Impact Analysis at S4-8. Imposing a new secondary standard through the proposed “reconsideration,” rather than following the statutory procedure for a five-year review, thus has the additional adverse and unlawful effect of eliminating needed analyses of the regulatory impact analysis of the proposed secondary ozone NAAQS. See Supplemental RIA at S4-10 (“Because of these complexities as well as limited time and resources within the expedited schedule, we are limited in our ability to quantify the costs and benefits of attaining a separate secondary NAAQS for ozone for this proposal.”)

### **Revision of the Primary NAAQS at this Time Is Not Warranted.**

Under CAA section 109(b)(1), EPA is to set primary National Ambient Air Quality Standards (NAAQS) at level “requisite to protect the public health” with “an adequate margin of safety.” Courts have held this to mean that the primary NAAQS must be sufficient to protect public health but not more stringent than necessary to protect public health. See *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 473

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<sup>2</sup> EPA’s abbreviated reconsideration procedure also raises concerns about how new information provided in public comments may be handled. Some organizations have stated publicly that they intend to submit recent scientific studies or analyses of studies for the record. It would be unlawful for EPA to consider new or more recent data submitted by one or a few commenters without (a) considering all of the information submitted by all commenters (i.e., not pick and choose the information most supportive of EPA’s position) and (b) also engaging in the thorough review of all of the latest scientific knowledge as the CAA requires.

(2001). In other NAAQS rulemakings, EPA has indicated that it is appropriate to weigh a number of different considerations in deciding what level of a pollutant is “requisite” to protect public health and what constitutes an “adequate” margin of safety. These factors include, for example, the strength of the scientific evidence being considered, the severity of the health effects attributed to a particular concentration, the kind and degree of uncertainties involved, and the size and nature of the sensitive populations at risk.

While an agency can reconsider a prior action, it has to justify a change in position. This is particularly important when the agency is reaching a different conclusion from the same data (as it is here). See, e.g., *Motor Vehicle Manufacturers’ Ass’n v. State Farm Automobile Insurance Co.*, 463 U.S. 29, 57 (1983). That justification is lacking in this case. The post-rule letter from CASAC, which EPA relies on to a significant extent in the preamble to the proposed ozone NAAQS, was outside of CASAC’s statutory charge, as explained above, and the Administrator cannot rely on CASAC for the judgments that the Administrator has to make, weighing all the relevant considerations, in order to set an NAAQS.

In the short amount of time available to review the proposed ozone NAAQS, AF&PA and AWC have not been able to obtain an expert evaluation of EPA’s stated rationale for lowering the ozone NAAQS below the level set in 2008. AF&PA and AWC are aware of scientific analyses that other industry groups are submitting, however, and we urge EPA to give their comments serious and thorough consideration before acting on the proposal.

Some limitations on EPA’s purported basis for lowering the primary NAAQS for ozone are apparent. Because EPA does not have a strong justification for changing the 2008 standard so soon, and in reliance on the same database, EPA should maintain the primary standard at 0.075 ppm, where it is under current regulations.

In simple terms, EPA is proposing to reduce the primary ozone NAAQS based primarily on clinical studies showing respiratory effects in sensitive individuals at 0.060 ppm, and on epidemiology studies suggesting that there may be effects of exposure to ozone concentrations below 0.075 ppm. The clinical studies, however, did not demonstrate a clear adverse health effect from exposure to ozone concentrations below 0.075 ppm, even in the harsh conditions of the clinical tests. Rather, they showed diminished lung function, according to some measures, in some individuals. The significance of those effects is unclear, however. Such observations do not justify a conclusion that EPA needs to revise the current ozone NAAQS in order to provide adequate protection of public health, especially when viewed in the context of the achievability and societal costs of lowering the primary standard on that uncertain basis.

Also, in considering studies which subjected individuals to prolonged exposure to ozone, i.e., to six-plus hours of exposure that in many cases included continuous or intermittent exercise, EPA needs to weigh the results against the probability of that kind of exposure, i.e. that sensitive individuals will be exerting themselves for a prolonged period at a time and location where maximum ozone concentrations occur.

The epidemiological studies EPA suggests justify reducing the primary ozone NAAQS necessarily are a very indirect and imprecise way of assessing the level of ozone requisite for the protection of public health. It is very difficult, and in many cases impossible, to separate the observed effects into effects caused by ozone and effects caused by other pollutants (or by a combination of ozone and other pollutants). Certainly the epidemiological studies EPA references as supporting a revised primary ozone NAAQS (which were carefully considered in the rulemaking for the existing standards) do not constitute the kind of clear evidence of insufficiency that would be needed to justify changing the judgments reflected in the 2008 rulemaking. (Nor, obviously, do they constitute any evidence of a critical need for a revised standard that might justify bypassing statutory procedures for establishing NAAQS.) If EPA wants to use empirical observations for large groups to reevaluate the appropriate level for the primary NAAQS, AF&PA and AWC suggest that a much better approach would be for EPA to study the effect that ongoing and future reductions in ambient ozone levels, as well as in the ambient levels of other pollutants, resulting from current NAAQS and from various major air regulations that are coming into effect, will have on respiratory health.

Importantly, the very fact that EPA is considering setting the revised primary NAAQS somewhere in a fairly broad range of 0.060 to 0.070 ppm indicates that, at the least, the low end of the range cannot be said to be “requisite” to protect public health from “adverse” effects. As EPA notes, “while the CASAC Panel supported a level of 0.060 ppm, they also supported a level above 0.060, which indicated that they did not believe the results of the Adams studies meant that the level had to be set at 0.060 ppm.” 75 Fed. Reg. at 2992. Mindful of the Supreme Court’s admonition that EPA cannot set the primary NAAQS at a level that is “more [stringent] than necessary,” *Whitman v. Am. Trucking Ass’ns*, 531 U.S. at 474, EPA should not in any event set the primary ozone NAAQS at 0.060 ppm, since even CASAC did not conclude that a standard that low was necessary.

As EPA and the courts have acknowledged, while “the only concentration for ozone and PM that is utterly risk-free, in the sense of direct health impacts, is zero,” *American Trucking Associations v. EPA*, 175 F. 3d 1027, 1034 (DC Cir. 1999), the “CAA does not require the Administrator to establish a primary NAAQS at a zero-risk level,” 75 Fed. Reg. at 2940, citing *Lead Industries Association v. EPA*, 647 F.2d at 1156 n. 51. Rather, the “question is one of degree.” *American Trucking Associations*, 175 F. 3d at 1037. Thus, establishing primary NAAQS necessarily

involves value judgments (which is part of the reason why EPA cannot simply defer to CASAC) and weighing the severity of a predicted health effect and the certainty of the information from which that health effect is predicted. In that regard, EPA should and must consider the context, including the societal consequences of setting the NAAQS at a particular level. The lowering of the primary NAAQS that EPA is considering would, even under the most optimistic assumptions, cost the nation billions of dollars a year. At least at the lower end of the range EPA has proposed, the NAAQS could basically be at background levels, especially in parts of the country where coniferous trees emit significant amounts of VOCs. In recent years, for example, the ozone monitor in Glacier National Park, surely one of the areas most removed from anthropological sources of ozone precursors, recorded eight-hour averages as high as the upper 50s ppb, suggesting that monitors EPA wants placed in other rural areas could well show nonattainment with a primary NAAQS set at 0.060 ppm. And there is even more uncertainty as to how the proposed secondary NAAQS would compare to background levels in rural areas.

In this context (and in the context as well of reversing a decision made less than two years ago) it is critical for EPA to consider the severity of the health effects and the strength of the data on which those projected effects are based. Decrements in lung function without clear health impacts, or statistical correlations of ozone levels with, e.g., emergency room visits where the population was exposed to elevated levels of other pollutants as well, does not constitute evidence of the kind of significant, likely health effect that would justify imposing revising the NAAQS at this time, with tremendous economic and social consequences.

### **Revision of the Secondary NAAQS at this Time Is Not Warranted.**

Under CAA section 109(b)(2), EPA is to set secondary NAAQS at a level “requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air.” Inherent in this charge is the requirement that EPA not set the secondary NAAQS at a level more stringent than “requisite.” Clearly this directive must not be read literally to require EPA to set the secondary standard at a level where the pollutant would cause no adverse effect, no matter how small. In context, then, EPA must make a value judgment which necessarily involves balancing (even if not explicitly) the adverse effects predicted against the economic and technical feasibility of attaining a particular ambient concentration, i.e. the social impact of setting the secondary NAAQS at that level. EPA itself has said, in setting other NAAQS, that it can and should consider, among other things, the nature and severity of the risk involved and the strength of the data. These and similar considerations weigh against the proposed secondary NAAQS.

EPA asserts that there is “no evidence of an exposure threshold for vegetation effects” for ozone. 75 Fed. Reg. at 3020. Assuming that is true, it demonstrates that

the decision to establish a secondary NAAQS for ozone requires EPA to consider a range of factors in order to determine what is “requisite to protect the public welfare.” It is therefore entirely appropriate, and necessary, for EPA to consider, as it did in setting the 2008 secondary standard, uncertainties about the significance of adverse effects on vegetation at varying concentrations of ozone, uncertainties about what the background concentration of ozone is in different parts of the country, uncertainties about how many areas of the country currently fail to attain a particular ozone concentration or cumulative loading, and uncertainties about what would need to be done to achieve a particular secondary NAAQS. All of these factors are relevant to deciding upon a level for the secondary standard which draws an appropriate balance between risk to vegetation (where only zero ozone would eliminate the risk, at least according to EPA) and other effects on welfare (such as economic and social burdens of meeting a standard).

For reasons described in the preamble to the 2008 adoption of a secondary NAAQS equal to the primary NAAQS for ozone, and supported by comments in that rulemaking by numerous groups, it was entirely reasonable for EPA to determine, in light of all of the uncertainties involved, that setting the secondary standard equal to the primary standard was a reasonable balance that would provide an appropriate level of protection to vegetation and would constitute a level neither too low nor too high to protect the public welfare generally. No new facts have been identified in the preamble to the proposed rule to justify departing from that decision.

EPA should give substantial deference to the federal agency directly concerned with protection of agricultural and silvicultural resources: the U.S. Department of Agriculture. AF&PA and AWC agree with the assessment of the USDA Agricultural Air Quality Task Force in its white paper, “Proposed Revision of National Ambient Air Quality Standards (NAAQS) for Ozone (2007),” which is available at <http://aaqtf.tamu.edu/> and incorporated into the record for the promulgation of the 2008 ozone NAAQS, that, given the inadequacies and uncertainties in available data regarding the secondary standard, it would be inappropriate for EPA to establish a secondary standard that is different from the primary standard. The white paper indicates that much research is needed before EPA can set scientifically defensible regulatory policies concerning a revised secondary ozone NAAQS.

**EPA’s Proposed Approach To Implementing Revised Ozone NAAQS Is Unworkable and Unreasonable, and It Likely Will Delay Progress in Improving Ambient Ozone Levels.**

The proposed rule indicates that EPA plans a new and accelerated set of deadlines for implementing the revised ozone NAAQS it plans to issue by August 31st of this year. Even if EPA meets that goal, the deadlines it has proposed for

actions implementing new ozone ambient standards after they are promulgated are unworkable and inappropriate.

AF&PA and AWC agree with EPA that, if it changes the current NAAQS (adopted in 2008), states and EPA should not spend any more resources on attainment designations and SIP revisions based on the 2008 standards. But EPA cannot use its own decision to ignore the statutory five-year review process and the fact that EPA's alternative process interferes with the implementation of the 2008 standards as an excuse for setting unreasonable deadlines to implement the proposed new standards.

The dates EPA has proposed for states to submit their proposed attainment designations, EPA to finalize those designations, and states to submit State Implementation Plans showing attainment of the new ozone NAAQS are all shorter than the statute authorizes and, so far as AF&PA and AWC can recall, shorter than the periods EPA has provided for these actions in implementing earlier ozone NAAQS and other NAAQS. Yet the burdens imposed on state agencies and EPA would come at a time when the same personnel will be called upon to address attainment designations and SIPs for the just-promulgated revised NO<sub>x</sub> NAAQS and proposed new NAAQS for SO<sub>2</sub> and PM<sub>2.5</sub>. States and EPA also will need to address, during the same time period, new EPA requirements for ambient monitoring for NO<sub>x</sub> and proposed new monitoring for ozone and SO<sub>2</sub>. Add to the burden the fact that EPA is proposing a new type of secondary standard for ozone which regulatory authorities have not had to address before...plus of course the many other new air pollution programs that EPA is pursuing at the same time. In this context, an accelerated schedule for implementing the proposed new ozone NAAQS is unreasonable and would inevitably lead to regulatory decisions with tremendous implications that are not supported by the best science and policy analysis.

Particularly distressing is EPA's intention to require attainment designations for the proposed new ozone NAAQS, and even SIPs for areas not in attainment with the proposed new ozone NAAQS, to be submitted before three years of data (if any) are available for the substantially revised and expanded network of ozone ambient monitors that EPA is proposing. EPA has acknowledged that those new monitors, as well as the longer monitoring season in some states, may well result in a substantial increase in areas determined to be nonattainment. Thus, the result of the new implementation process EPA is proposing is that states and EPA will spend huge amounts of time developing attainment designations and SIPs that may have to change dramatically just a couple of years later. By the time stationary sources and transportation authorities have begun to install and operate new measures to meet the SIPS EPA would require to be submitted in Dec. 2013, anticipated new information could well require a very different attainment strategy. The cost of that wasted effort could be enormous. This is not the kind of ordered implementation process Congress had in mind, and it is not necessary.

Instead, EPA should continue implementation of the ozone NAAQS promulgated in 2008, and consideration of changes to the ozone NAAQS should follow the process Congress contemplated. This would allow, among other things, EPA to assess the effect of attaining the ozone NAAQS that have already been promulgated (and especially the 1997 revision to the standards), to gather data from the proposed new monitoring network and longer monitoring duration, to develop data and procedures that could be used to implement a secondary standard different from the primary standard, and otherwise to follow a more scientifically justified, less-rushed approach to assessing air quality and determining required further steps. (It would also allow the effect of other regulations—including other NAAQS, directed at ozone precursors such as NO<sub>x</sub>, PM<sub>2.5</sub>, and CO, as well as emission standards for hazardous air pollutants that directly or indirectly require VOC controls—to begin to be seen in ambient ozone concentrations, before embarking on a new set of potentially redundant or overlapping emission reduction requirements.) At the very least, EPA should adopt a phased approach—requiring a revised ozone monitoring scheme now, and then evaluating at least three years of data collected once the new monitors are in place before considering adopting revised primary and secondary ozone NAAQS and making new attainment designations.

The approach EPA is taking now will in many cases interfere with rather than promote acceptable air quality for ozone. EPA already has derailed implementation of the 2008 ozone NAAQS. Even with the accelerated implementation program EPA has suggested for the proposed new ozone NAAQS (which is unworkable and unwise, for the reasons described above), new requirements to reduce ambient ozone levels will be delayed beyond what would have applied but for EPA's "reconsideration." Importantly, the process EPA has embarked on, particularly insisting on a hastily-developed new set of SIPs based on ambient data that EPA thinks under-reports ozone nonattainment, will no doubt result in many sources challenging or seeking to defer emission control requirements until the full extent of necessary reductions (based on the expanded ambient monitoring scheme) is known. It is unreasonable to ask businesses and municipalities to undertake costly and disruptive changes under SIPs that may not be adequate to meet requirements for nonattainment areas once better monitoring data are available only a couple of years later. Realistically, this would result in confusion and delay and would often impede progress on air quality for ozone.

**Federal law and policy require EPA to conduct a comprehensive analysis of the regulatory impact of revising the ozone NAAQS, and this has not occurred.**

EPA's assessment of the projected economic impact of imposing the proposed ozone NAAQS is woefully inadequate and basically assumes away a large portion of the tremendous costs to the American public of meeting the proposed standard.

EPA projects that revising the primary standard to a level at or near 0.060 ppm would produce annual benefits of \$35-100 billion in 2020. But annual costs are projected to be \$52-90 billion. In other words, even using EPA's optimistic assumptions about attainment status, costs, and benefits (discussed further below, there is a good chance that the costs of meeting the revised NAAQS would exceed the benefits by billions of dollars. It also means that this "reconsideration," could be the single most costly EPA regulation ever promulgated. Even more troubling is that EPA is undertaking this action without following the procedures mandated by the Clean Air Act and without an adequate opportunity to develop the record. If EPA lowers the primary ozone NAAQS to a level at or near 0.070 ppm, EPA projects annual benefits of \$13-37 billion and annual costs of \$19-25 billion. Again, even with EPA's dubious assumptions it is entirely possible that the costs would exceed any benefits.

The situation is even more alarming for EPA's proposal to set a new secondary NAAQS for ozone. EPA acknowledges in the preamble to the proposed rule that (a) there are likely to be many areas that attain the primary ozone NAAQS but not the secondary ozone NAAQS; (b) that EPA can only guess at the extent of nonattainment from existing monitoring data; and (c) EPA's proposed new requirements for location of ambient monitoring stations will result in the placement of numerous new monitors in areas that may as result be identified as not attaining the secondary NAAQS. See 75 Fed. Reg. at 3018-19. But even based on the limited available data that admittedly underestimate the impact of the proposed secondary standard, EPA has estimated that as many as 250 counties that meet the current primary ozone NAAQS of 0.075 ppm could be in nonattainment with the proposed new secondary NAAQS. Supplemental Regulatory Impact Analysis at S4-4. Nevertheless, EPA "has not previously conducted an analysis of the costs and benefits of attaining a secondary NAAQS, which is an exceptionally complex task. ... Because of these complexities as well as limited time and resources within the expedited schedule, we are limited in our ability to quantify the costs and benefits of attaining a separate secondary NAAQS for ozone for this proposal." Supplemental RIA at S4-1. In other words, although the cost of meeting the proposed secondary NAAQS could well be tens of billions of dollars, and the benefits are uncertain, EPA has not taken the time to assess them.

EPA has not conducted a comprehensive analysis of the impacts resulting from the significant tightening of the ozone NAAQS that it is proposing. A number of statutes and executive orders require such an analysis before EPA imposes a huge new burden, in the tens of billions of dollars a year at the least, through its adoption of the proposed ozone NAAQS. A rule with such far-reaching consequences demands that kind of thorough review of its economic and social impacts before EPA could issue revised ozone NAAQS.

The U.S. economy is already in a precarious position, with unemployment stuck around the 10% level. Additionally, American businesses, municipalities, and individual citizens already are facing huge costs associated with a variety of regulations EPA is under court ordered deadlines to establish, has proposed, or has recently promulgated. Any analysis of the regulatory impact of the various alternatives EPA is considering for revising the ozone NAAQS must take these economic realities into account. Many of these rules—such as more-stringent NAAQS being imposed or considered for NO<sub>x</sub>, SO<sub>2</sub>, and PM<sub>2.5</sub>; new maximum achievable control technology requirements for boilers; and revisions to the Clean Air Interstate Rule and the Clean Air Mercury Rule—would impact greatly on many of the same types of sources that would be looked to for further reductions in ozone precursor emissions if the proposed ozone NAAQS was adopted. In addition, EPA has not (and cannot, since EPA cannot predict how many areas will be nonattainment with the new standards and new monitoring scheme) evaluated the potentially very large impact of the more-stringent New Source Review requirements (including emission offsets and Lowest Achievable Emission Rate, as well as lower major source size thresholds) that will apply to sources of VOCs and NO<sub>x</sub> located in or near new nonattainment areas.

In addition, given the adverse potential impacts on natural gas and other energy prices that may result from implementation of the current proposal, because of the need to reduce NO<sub>x</sub> emissions, at least in part through fuel-switching, EPA must comply with Executive Order 13211, which requires the consideration of the effect this kind of environmental regulation would have on energy supplies.

The fact of the matter is that neither EPA nor anyone else has a good idea of what effect of the proposed amendments to the ozone NAAQS would have on the attainment status of many of counties in the United States, nor of what would be required in order to attain an 8-hour standard within the range EPA has proposed. This is because, among other things: (1) states and EPA have not yet completed even the determination of attainment status under the current ozone NAAQS; (2) EPA has already concluded that the existing monitoring network is not adequate for identifying locations with the highest 8-hour average ozone concentrations; (3) EPA is also proposing a simultaneous new initiative to locate or relocate monitors to sites expected to have the highest short-term ambient ozone concentrations, which will generate a tremendous amount of data from something like 270 new monitoring sites; (3) EPA also is planning to require ambient monitoring for more months per year for many localities, concluding that those localities currently may be missing ambient standard exceedances; and (4) the proposed new secondary NAAQS will require new manipulations of monitoring data and also will be affected by EPA proposed requirements for new monitoring stations, especially those in parks and other rural areas.

Given that EPA is proposing to require hundreds of additional ambient ozone monitoring locations, at points of likely short-term maximum concentrations which

EPA asserts largely are missed by the existing monitoring network, EPA cannot predict how many counties will fail to meet the proposed new ozone NAAQS and how great the deviation from the NAAQS will be. The lack of EPA's ability to predict the impact of its proposal is perhaps particularly pronounced with respect to the secondary standard. EPA asserts that 8-hour average monitoring data often is not predictive of whether an area will be in compliance with a cumulative standard as EPA has proposed. Moreover, many of the new ambient monitors EPA will be requiring will be in areas most likely to experience exceedances of the secondary standard without exceeding the primary standard. See 75 Fed. Reg. at 3018-19.

But even for areas where EPA concluded that existing data show that the area would be designated nonattainment and additional reductions in ambient ozone would be required, EPA was unable in many cases to identify any pollution control measures that could be implemented to meet the proposed ozone NAAQS. In those cases, EPA simply speculated that unspecified emission reductions would somehow be identified to bring the area into attainment. See, e.g., Supplemental RIA at S-10. For that and other reasons, EPA effectively admits that its compliance cost estimates are "highly uncertain." *Id.* But the very magnitude of the gap between engineering controls that EPA could postulate and the emission reductions necessary to attain the proposed ozone NAAQS, even for those limited areas where EPA already has data showing nonattainment, gives an indication of how severe the economic impact would be. And, as noted above, EPA has not even attempted to estimate the compliance costs for the proposed secondary ozone NAAQS.

Note also that EPA's estimate that meeting the proposed revised primary ozone NAAQS could cost as much as \$90 billion does not even include a large element of compliance costs: the EPA estimates "do not include the costs or benefits of attaining the alternate standards in the San Joaquin Valley and South Coast air basins in California, because we expect that nonattainment designations under the Clean Air Act for these areas would place them in categories afforded extra time beyond 2020 to attain the ozone NAAQS." Supplemental RIA at S1-3. Again, rather than take the time and provide an honest assessment of the regulatory impact, EPA has just assumed the problem away.

Importantly, a substantial portion of the benefits that EPA claims for the proposed primary ozone NAAQS comes not from reducing concentrations of ground-level ozone but from reductions in fine particulate matter that EPA speculates would be a side-effect of controls that sources would have to adopt to reduce emissions of the ozone precursor  $\text{NO}_x$ . This seemingly ignores the fact that EPA already sets primary NAAQS for  $\text{PM}_{2.5}$  at a level requisite to protect public health with an adequate margin of safety. Additionally, EPA has numerous other regulatory initiatives, such as hazardous air pollutant emission standards for boilers, the Clean Air Implementation Rule, and others, that will produce substantial reductions in ambient  $\text{PM}_{2.5}$  exposure regardless of what happens with the ozone NAAQS. There is, therefore, no sense to claiming health benefits from reductions in ambient  $\text{PM}_{2.5}$

concentrations as a result of lowering the ozone NAAQS (even if those lower ambient PM<sub>2.5</sub> concentrations were necessarily an outcome of lowering the ozone NAAQS, which they are not).

EPA also has not given needed consideration to the effects that lowering the primary and secondary ozone NAAQS could have on greenhouse gas emissions. Often, requirements to reduce volatile organic compound emissions to try to reduce ambient ground-level ozone concentrations have translated into requirements for sources to collect and thermally oxidize those VOCs. Burning large quantities of natural gas to ensure thermal destruction of generally low-concentration, high-flow gases captured from VOC-using or –generating processes releases millions of metric tons of carbon dioxide. A new rule that forces even more gas-burning to produce even further reductions in VOC emissions beyond that already achieved or to be achieved under the existing ozone NAAQS may not, on balance, be worth the adverse effect on greenhouse gas emissions. It would be arbitrary and capricious for EPA to impose more stringent ozone NAAQS without carefully considering this effect.

In addition, in many instances attempting to meet the new ozone NAAQS would require combustion sources to reduce their NO<sub>x</sub> emissions. This would encourage and in some cases force sources burning solid fuel like coal or biomass, as well as those burning oil, to switch to natural gas. This would have important implications for energy supply and cost. Moreover, because burning biomass such as wood waste does not contribute to higher atmospheric carbon dioxide concentrations, since carbon dioxide was removed from the atmosphere by the plant to form the biomass, a new regulation that has the effect of causing sources to switch away from burning biomass towards burning other carbon-based fuels will cause a net increase in atmospheric carbon dioxide. EPA has asserted that current carbon dioxide emissions have negative implications for both health and welfare, and if so such effects must not be ignored by EPA in deciding what level of ozone NAAQS is requisite to protect human health and welfare. This consideration is particularly compelling with respect to the proposed new secondary NAAQS, since the secondary standard reflects only “welfare” effects, and the CAA defines “welfare effects” specifically to include effect on “climate.” See CAA section 302(h).

\* \* \* \* \*

In summary, AF&PA and AWC believe that EPA has not justified the proposed downward revision of the ozone NAAQS adopted in 2008, either on the merits or as a matter of following appropriate procedure. It makes no sense to rush to revise the ozone NAAQS when the nation is just beginning to determine what is necessary to meet the existing NAAQS, based on existing monitoring data, and EPA plans to require wholesale changes in the monitoring network as well. The procedure EPA is following has delayed air quality improvements rather than hastened them. The

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burden of the proposed ozone NAAQS on American citizens would be great, and the benefits of adopting the revised standards would be uncertain at best.

If you have any questions about these comments, please contact Tim Hunt, AF&PA's Senior Director, Air Quality Programs, at (202) 463-2588 or at [tim\\_hunt@afandpa.org](mailto:tim_hunt@afandpa.org).

Sincerely,

A handwritten signature in blue ink that reads "Paul Noe".

Paul Noe  
Vice President for Public Policy  
American Forest & Paper Association

A handwritten signature in black ink that reads "Robert W. Glowinski".

Robert Glowinski  
American Wood Council