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# United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WASHINGTON, DC 20510-6175

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March 27, 2014

Dr. H. Christopher Frey  
Chair, EPA Clean Air Scientific Advisory Committee  
Distinguished University Professor  
Department of Civil, Construction, and Environmental Engineering  
North Carolina State University  
Raleigh, NC 27695-7908

Dear Dr. Frey:

As the Clean Air Scientific Advisory Committee (CASAC) reviews and prepares to make recommendations to the EPA Administrator on the ozone national ambient air quality standard (NAAQS), I remain concerned about the continued lack of transparency by the EPA when promulgating air regulations and the health benefits claimed by EPA in support of a revised primary standard. Far too many of EPA's expensive air regulations rely on data neither sufficiently vetted nor provided the opportunity for independent evaluation. While the Agency continues to seek revised ozone standards, below the current 75ppb, that would place the majority of the country into nonattainment, I question the rationale and data underlying the technical documents which form the basis for its proposal. These documents are summarized and prepared by EPA staff for review by CASAC members, which indicates a lack of independence in the scientific review process as well as an apparent shepherding of CASAC.

Congress created CASAC in the 1977 Clean Air Act (CAA) Amendments to review and make independent recommendations to the EPA Administrator. This review and recommendation process includes the science underlying the NAAQS:

“This committee is intended to assist the Administrator, but it is also intended to have complete independence. This independence will help provide an outside mechanism for evaluating whether any pollutant may reasonably be anticipated to endanger public health or environment, for evaluating the scientific and medical data which might bear on this question, and for reviewing gaps in the available data and recommending additional needs for research.”<sup>1</sup>

Support of CASAC's “complete independence” and unbiased, thorough review of the 2008 ozone standard is particularly important given the controversial history of the ozone NAAQS process and the abundant uncertainty surrounding the health benefits of tightening the standard to EPA's proposed 60-70 parts per billion (ppb) range.

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<sup>1</sup> H.R. Rep. No. 95-294 at 182-83 (1977).

As a nation, we expended significant resources to reduce ozone levels over the years, and succeeded in reducing those levels 30 percent since 1980. In 2008, EPA lowered the ozone NAAQS to 75ppb, virtually doubling the number of counties in nonattainment. Today, many states are only in the early stages of implementation of control strategies to meet that standard. Discounting the implementation delays created by the Agency itself due its premature and ultimately abandoned political reconsideration of the ozone standard, EPA is once again attempting to force through a lower standard of 60-70ppb, expected to plunge most of the U.S. into nonattainment, including essentially all commercial, metropolitan, and industrial hubs, as well as most rural areas. A nonattainment designation brings with it harsh consequences including emissions offset requirements, mandatory vehicle inspections, and economic penalties. With increased areas in nonattainment, offsets will be scarce and business expansion in many areas across the country is likely to grind to a halt. Job-creating projects could be permanently lost or significantly delayed.

My state of Louisiana – along with 33 other states – is projected to be entirely in nonattainment if the standard is set at 60ppb. As President Obama recognized prior to the 2012 election, EPA’s estimated \$90 billion annual price tag dooms our already struggling economy. Implementation would be enormously detrimental for businesses, counties, and states before they have a chance to comply with the 2008 standard of 75 ppb. It is important that CASAC no longer ignore the correlation between human and economic health. While EPA may fail to provide CASAC with an analysis of “any adverse public health, welfare, social, economic, or energy effects which may result from various strategies for attaining the NAAQS,” the CAA requires CASAC to advise the Administrator on just such effects.<sup>2</sup>

Beyond questioning the need for implementing further restrictions prior to fully implementing the 2008 standard, confidence in the data underlying EPA’s scientific justifications for lowering the standard continues to deteriorate. According to testimony submitted to CASAC, an error in EPA’s estimates of mortality from short-term ozone exposure was discovered only after EPA shared the full data set with other researchers. In this case, one researcher examining the data found that the results could not be replicated. This led EPA to discover a mistake in its findings and to release a corrected version only one day (March 12, 2014) before comments on the ozone data were due. This confirms my view that EPA should not be relying on “secret” data that avoids necessary scientific vetting. CASAC should direct EPA to discount scientific studies for which the data are not released and provide greater weight to studies for which the data are publicly available.

EPA continues to rely on an older cohort study (Jerrett *et al.* 2009)<sup>3</sup> to extrapolate mortality risks from chronic exposure to ozone, despite the National Research Council (NRC) cautioning EPA in 2004 to not rely solely on studies that update the American Cancer Society or Harvard Six Cities Study due to outdated risk factors. NRC stated studies like Jerrett *et al.* 2009 “alone will have little use for decision-making” due to the

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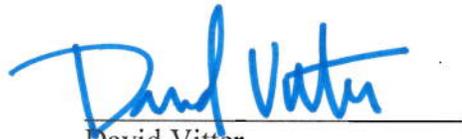
<sup>2</sup> 42 U.S.C. Section 7409(d)(2)(C)

<sup>3</sup> Jerrett, Michael, R. T. Burnett, C. A. Pope, III, K. Ito, G. Thurston, D. Krewski, Y. Shi, E. Calle, M. Thun 2009. “Long-Term Ozone Exposure and Mortality.” *New England Journal of Medicine* 360:1085-1095.

fact that the “cohorts were established decades ago, and some critical data items, including residence history and potential confounding and modifying factors, have not been comprehensively updated.”<sup>4</sup> While EPA is not relying exclusively on Jerrett *et al.* 2009 to evaluate the health risks from ozone, the Agency is relying exclusively on this study to estimate mortality risk from long-term exposure to ozone. However, in the Regulatory Impact Analysis (RIA) for 2008 ozone NAAQS, EPA acknowledged there was considerable uncertainty in the association between ozone and mortality<sup>5</sup>; in the Supplemental RIA that accompanied EPA’s 2010 reconsideration of the ozone NAAQS, EPA stated, “It is important to note that as the stringency of the standards increases, we believe that the uncertainty in the estimates of the costs and benefits also increase.”<sup>6</sup>

Ultimately, the CAA requires that the standards are set in the judgment of the Administrator at the level requisite to protect public health and welfare with an adequate margin for safety.<sup>7</sup> It is imperative that CASAC and EPA utilize the best available peer-reviewed scientific information on which to base the significant decision of whether to maintain or revise, as appropriate, the ozone NAAQS. It is CASAC’s statutory duty to independently “provide an outside mechanism for evaluating whether any pollutant may reasonably be anticipated to endanger public health or environment, for evaluating the scientific and medical data which might bear on this question, and for reviewing gaps in the available data and recommending additional needs for research.”<sup>8</sup> Either entity undercutting the transparent, independent and comprehensive review of not only the science but the effects on the public and the economy from actions taken to achieve NAAQS compliance perpetuates the public mistrust of the process, its outcomes, and the EPA.

Sincerely,



David Vitter  
Ranking Member  
U.S. Senate Committee on  
Environment and Public Works

cc: Dr. Holly Stallworth, CASAC Designated Federal Officer  
Members of the CASAC Ozone Review Panel

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<sup>4</sup> National Research Council. *Research Priorities for Airborne Particulate Matter: IV. Continuing Research Progress* (2004) Board on Environmental Studies and Toxicology. p.135 Available at [http://www.nap.edu/catalog.php?record\\_id=10957](http://www.nap.edu/catalog.php?record_id=10957)

<sup>5</sup> U.S. Environmental Protection Agency. 2009. *Final Ozone NAAQS Regulatory Impact Analysis*. p. 6-1. Available at [http://www.epa.gov/ttn/ecas/regdata/RIAs/452\\_R\\_08\\_003.pdf](http://www.epa.gov/ttn/ecas/regdata/RIAs/452_R_08_003.pdf)

<sup>6</sup> U.S. Environmental Protection Agency. 2010. *Regulatory Impact Analysis for the Reconsideration of the 2008 Ozone National Ambient Air Quality Standard*. January. at S1-1. Available at [http://www.epa.gov/ttn/ecas/regdata/RIAs/s1-supplemental\\_analysis\\_full.pdf](http://www.epa.gov/ttn/ecas/regdata/RIAs/s1-supplemental_analysis_full.pdf)

<sup>7</sup> 42 U.S.C. 7409(b)(1).

<sup>8</sup> H.R. Rep. No. 95-294 at 182-83 (1977).