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September 29, 2014

Administrator Gina McCarthy
U.S. Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mail Code 28221T
Attention Docket ID. No. EPA-HQ-OAR-2012-0918
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: EPA Responses to State and Tribal 2012 Primary Annual Fine Particle Designation Recommendations, 79 Fed. Reg. 51517 (8-29-14), EPA-HQ-OAR-2012-0918.

Dear Administrator McCarthy:

The American Lung Association appreciates this opportunity to provide comment on the U.S. Environmental Protection Agency's responses to the state and tribal designation recommendations under the 2012 annual $PM_{2.5}$ national ambient air quality standard (NAAQS). The current air quality standards have the potential to alleviate and prevent death, disease, and human suffering to an enormous degree, but only if they are fully implemented across the nation. The American Lung Association is extremely concerned about the EPA's proposal to designate numerous areas as "unclassifiable" based on data quality and completeness issues, and the impact that has on protecting the health of millions of people. The EPA needs to ensure that these people receive the protections they deserve under the standard.

The public faces life-threatening risks from fine particulate matter.

As you know, the American Lung Association advocated for the EPA to adopt the strongest national air quality standard in 2012 to protect public health from the day-in and day-out exposures recognized from fine particulate matter. Ample scientific evidence supported adopting a tighter standard to protect the health of people who are most susceptible to the serious health effects of these pollutants. More than 10,000 peer-reviewed scientific studies validated and extended earlier epidemiologic research linking both acute and chronic fine particle pollution with serious morbidity and mortality. The newer research had expanded the nation's understanding of the range of health outcomes associated with PM, and identified adverse respiratory and cardiovascular health effects at lower exposure levels than previously reported. As discussed and interpreted in the EPA's 2009 *Integrated*

Science Assessment for Particulate Matter (ISA),[1] the evidence reinforced already strong existing studies and supported the conclusion that $PM_{2.5}$ was causally associated with numerous adverse health effects in humans, at exposure levels far below the 1997 standard. In late 2013, the International Agency for Research on Cancer, part of the World Health Organization, concluded that particle pollution could cause lung cancer. The IARC reviewed the most recent research and reported that the risk of lung cancer increases as the particle levels rise.[2]

Because of the population exposed, the complexity of the components and the wide-ranging health effects, $PM_{2.5}$ is likely the most lethal air pollutant. Certainly, PM increases the risk of early death from heart disease, lung disease and cancer – the three leading causes of mortality in the U.S.

These threats demand prompt action to protect human health.

By the EPA's own estimates, premature mortality attributable to fine particle air pollution ranges from 63,000 to 88,000 deaths each year in the United States.[3]

These are preventable deaths. We have the means to control manmade air pollution to end this unnecessary toll on human life. Further, air pollution control efforts driven by more protective air quality standards for PM have the potential to diminish sickness and suffering. In an article published in *Risk Analysis,* the EPA staff pegged the annual morbidity impacts of $PM_{2.5}$ pollution at tens of thousands of hospital and emergency department visits for cardiac and respiratory causes and millions of asthma exacerbations, bronchitis, and other respiratory symptoms in children.[4]

Millions of Americans have pre-existing health conditions that make them particularly susceptible to harm from particulate air pollution. Nearly twenty-six million Americans have asthma, including 5.8 million children, 15.3 million have been diagnosed with COPD, 20.3 million have cardiovascular disease and 24.3 million have diabetes.[5]

The current air quality standards have the potential to alleviate and prevent death, disease, and human suffering to an enormous degree, but only if they are fully and expeditiously implemented across the nation.

That is the issue we raise today in the EPA's proposed responses to the States and Tribes on their recommendations for designations for fine particle standards.

EPA's proposed response leaves millions unprotected.

The EPA reports that audits found quality control and completeness issues in air quality data for Illinois, Tennessee, and Georgia, as well as Puerto Rico, the Virgin Islands and the Pechanga Areas of Indian Country in California. As a result, the EPA is proposing to designate as "unclassifiable" numerous counties and metro areas with data quality and/or completeness issues, including the entire state of Illinois and most of Tennessee. Under

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[1] U.S. Environmental Protection Agency. Integrated Science Assessment for Particulate Matter (Final Report). U.S. EPA, Washington, DC, 2009; EPA/600/R-08/139F.

[2] World Health Organization International Agency for Research on Cancer. IARC Monograph on the Evaluation of Carcinogenic Risks to Humans. Volume 109, Outdoor Air Pollution. Lyon: IARC (in Press).

[3] U.S. EPA. Quantitative Health Risk Assessment for Particulate Matter, Second External Review Draft, EPA-452/P-10-001 February 2010.

[4] Fann N, Lamson AD, Anenberg SC, Wesson K, Risley D, Hubbell BJ. Estimating the National Public Health Burden Associated with Exposure to Ambient PM2.5 and Ozone. Risk Analysis 2012; 32: 81-95.

[5] Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. 2012.

the EPA's proposed approach, the metropolitan areas of Chicago, St. Louis, Atlanta, Memphis, Nashville, and Knoxville, as well as smaller cities, will not receive the protections required by the Clean Air Act (the Act) for nonattainment areas, even if they are in fact violating the 2012 standard. By our estimate using the 2012 Census data, more than 23.1 million people will live in these communities alone.

The American Lung Association is concerned about the millions of people who live in the states and counties that would be "unclassifiable" under the EPA's approach. The Act directs the EPA to designate areas violating the NAAQS as "nonattainment" and requires strong protective measures for such areas. E.g., 42 U.S.C. §7502-7506, 7513-7513b. The EPA leaves unstated what happens for areas that receive a designation of "unclassifiable;" For practical purposes, the EPA has historically treated such areas as though they are meeting the standard, and therefore are not subject to the stronger protections required for nonattainment areas. Moreover, the EPA has taken the position that once it has designated an area as unclassifiable, the agency had no obligation to redesignate the area as nonattainment, even if adequate data showing nonattainment becomes available.

The EPA's proposed approach here flouts the Act and would be arbitrary. Congress set up a carefully designed approach in which areas violating a revised NAAQS must be designated nonattainment and then take steps specified in the law to reduce emissions and remedy that nonattainment. The EPA's proposal would unlawfully and arbitrarily circumvent that approach by deferring nonattainment designations indefinitely and construing the Act in a manner designed to maximize its own discretion. In the process, the EPA's action would encourage states to follow sloppy or deficient data collection and analyses, as they would be rewarded by avoiding nonattainment designations.

To the extent that there are data quality or completeness issues in some areas with respect to the three most recent years, the EPA needs to address those issues in a lawful and non-arbitrary way. To the extent that data for 2011-13 and 2010-12 are incomplete or do not meet quality criteria, the EPA must nonetheless designate areas nonattainment where the most recent prior years for which adequate, quality-controlled data **show** violation of the 2012 NAAQS.[6] For example, annual $PM_{2.5}$ design values for Chicago, St. Louis, and Atlanta have exceeded the 2012 standard for every 3-year period prior to 2011-13, at least as far back as 2001-2003. EPA, $PM_{2.5}$Design Values 2011-2013 Final 8-28-14, Tables 3a and 6, (attached and also available at: http://www.epa.gov/airtrends/values.html). A monitor in Knoxville showed violations of the 2012 standard in both 2010-12 and 2009-11. Id. Table 6. The EPA has not disqualified the data for these cities for all these prior years.[7] There is no reasoned basis to disregard all of the above-referenced evidence of nonattainment merely because data for 2011-13 and/or 2010-12 is incomplete or has quality control issues. The EPA has provided no showing that air quality has improved to such a degree that the nonattainment shown by the data for prior years

[6] We note that the EPA guidance has repeatedly stated that designations are to be based on the most recent three consecutive years for which quality-assured data is available. See, e.g., Memorandum from Jeffrey R. Holmstead to Regional Administrators, "Designations for the Fine Particle National Ambient air Quality Standards," April 1, 2003, Attachment 2 at 3; Memorandum from Gina McCarthy to Regional Administrators, Regions 1-10, "Initial Area Designations for the 2012 Revised Primary Annual Fine Particle National Ambient Air Quality Standard, April 16, 2013, at 3.

7 Indeed, for Atlanta, the EPA has expressly found that data showing nonattainment in 2010-12 is valid. EPA, Georgia Unclassifiable Area Designations for the 2012 Primary Annual PM2.5 National Ambient Air Quality Standards Technical Support Document at 7. Given that the EPA's own guidance for designations for the 2012 standard provided for basing such designations on 2010-12 data, and only allowed for use of 2011-13 data instead if such data was available and valid, the EPA has no basis for designating Atlanta anything other than nonattainment.

in these and other areas has somehow been cured, nor does the record support such a showing. Accordingly, it would be arbitrary and unlawful for the EPA to treat such areas as anything other than nonattainment.

In the alternative, the EPA must at the very least extend the time for promulgating final designations by the additional year provided under 42 U.S.C. §7407(d)(1)(B)(i) for the portions of the eight states/territories for which the EPA is proposing unclassifiable designations based on data quality/completeness issues (Puerto Rico; U.S. Virgin Islands; Atlanta, Glynn County and Dougherty County, Georgia; Tennessee (except Chattanooga); Illinois; St. Louis, Missouri; and areas of Indian Country, CA). That additional year is specifically provided under the statute for situations where the EPA has insufficient information to promulgate the designations. The EPA has failed to demonstrate that the data quality and completeness issues it cites cannot be cured, or nonattainment/attainment cannot be determined in other ways, within such an additional year. The EPA has proposed to provide such an additional year for designations in Georgia, and there is no reason to take a different approach as to the other areas with data adequacy and quality issues. Even where the data quality/completeness issues for monitored data cannot be resolved in a year, the additional time could be used to conduct modeling and other analyses to determine whether the area is nonattainment. See Holmstead Memo at 7 ("dispersion modeling and data interpolation techniques…can help assess the geographic area violating and/or contributing to a violation of the standards."). In this regard we note that, when faced with insufficient monitoring sites to identify all areas violating the 1-hour sulfur dioxide standard (as adopted in 2010), the EPA did not designate all the unmonitored areas "unclassifiable," but developed a plan to designate them based on modeling or additional monitoring.

For areas where existing data are truly inadequate, and where an additional year is truly insufficient to cure data quality and/or incompleteness problems or develop sufficient information for reasoned designations (other than unclassifiable), the EPA must at a minimum require steps and a timeline to resolve the issue. The agency must set a deadline for the quality assured data or modeling to be provided and assessed for an attainment/nonattainment determination, and also set a deadline by which the designation process will be completed. For designations based on monitoring, attainment/nonattainment designations must be completed at the earliest possible date after validation of quality controlled data for 2014-16 at the outside. The EPA cannot allow laboratory data problems to delay and deny millions the protections to which they are entitled under the standard-setting process.

The EPA must also put in place steps to work with the States and Tribes to review the available data and to expeditiously update the laboratory systems to restore the quality controls needed for the data measurement. States and Tribes have, too often, lacked adequate resources to maintain these essential public health tools. The Lung Association continues to advocate for increased resources for them to do their work. However, it is neither consistent with the Act nor rational for the EPA to simply treat communities where data is inadequate as though they are in attainment.

The Lung Association is keenly aware of, and strongly supports, steps the EPA has taken to reduce emissions from the sources that contribute to the burden of particulate matter. However, even with these measures, getting $PM_{2.5}$ levels below the 2012 standard has been challenging in many areas, including in the areas that now face lack of data. As noted above, cities like Chicago, St. Louis, Atlanta, and Knoxville, have repeatedly violated the 2012 standard in recent years despite additional national measures adopted by the EPA.

Resolution must come as soon as possible. The health and lives of 23.1 million people cannot wait until the next NAAQS is adopted to determine what the actual $PM_{2.5}$ levels are that they are breathing each day. Assuming the EPA completes its next review—which has not started—on time in 2017, the earliest new designations would be made is 2019. Given the Agency's history of these reviews, even if the next review begins in 2015, the next designations will not occur until 2022 or later. That is not at all what the Clean Air Act requires to happen.

Thank you for the opportunity to comment on these proposed responses. We urge the EPA to act quickly to ensure that the millions of people who are in these States and Tribes receive the protection that the Clean Air Act requires.

Sincerely,

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