Comments from Albert Rizzo, MD

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To the Clean Air Scientific Advisory Committee on the Policy Assessment for Reconsideration of the National Ambient Air Quality Standards for Particulate Matter, External Review Draft

Docket No. EPA-HQ-OAR-2015-0072

November 17, 2021

Thank you for this opportunity to share some comments from the American Lung Association on the draft Policy Assessment. I am Albert Rizzo, MD, Chief Medical Officer for the American Lung Association. I will share a brief summary of our comments today and we will follow-up with our full comments in writing.

The American Lung Association appreciates the diligence and thoroughness of the EPA staff in preparing this document. In general, we find much to support in their assessment. They have attempted to provide a full, extensive review, including addressing the shortcomings of the previous review that precipitated the need for this reconsideration.

As a science-based organization, the Lung Association is pleased and relieved that EPA has revised the process for this reconsideration of the PM standards, with an emphasis on science. In particular, we appreciate the reconstitution of the CASAC chartered panel, the reinstatement of the PM Panel and the examination of some of the literature that has been published in the last four years on the health harms from this deadly pollutant.

We appreciate that in the draft PA, EPA included an examination of the relationship between PM2.5 exposure and health outcomes with both a *causal* and *likely to be causal* relationship. However, we believe that the fact that the supplement to the 2019 ISA does not include more recent findings about respiratory health, cancer and nervous system effects may have affected the results of the risk assessment in ways that will hamper the ability to fully evaluate the policy implications of the evidence.

The evidence included does clearly demonstrate the potential for public health benefit from more stringent standards. The risk assessment in the draft PA calculates that over 45,000 deaths in 2015 are attributable to long-term PM2.5 exposure from air quality just meeting the current annual standard. The risk estimate for at-risk populations provides valuable insight into the positive impact of tightening the standards on reducing the disparities in exposure and risk experienced by communities of color. It finds that Blacks, the population group that suffers the most from particle pollution, will experience proportionally greater benefit from successively lower annual standards than other groups. This would surely be a welcome outcome.

Given the growing body of research finding adverse health effects at PM levels well below the current 24-hour standard, we urge EPA to recognize that the short-term standard set in 2006 fails to adequately protect public health. We do not believe that it is appropriate or sufficiently protective to treat the 24-hour standard as a supplement to the annual standard. For communities in Alaska, parts of the West and parts of New England, shorter term exposures pose the primary risk because of the episodic emissions from woodstoves and other sources. Nearly all these areas have year-round concentrations that are well under the annual standard.

Furthermore, heat and drought caused by climate change are leading to more spikes of unhealthy levels of particle pollution over time. In the Lung Association's *State of the Air 2021* report, we found that for the three years from 2017 to 2019, close to 54.4 million people living in 88 counties experienced unhealthy spikes in particulate matter air pollution. Many cities reached their highest number of days with unhealthy levels of PM ever reported, putting more people at risk.

We would also urge EPA to reconsider the *form* of the short-term standard; specifically, to recognize that the 98th percentile form fails to protect public health. That form dates to 1997 and allows 21 days in the three-year review period to reach levels well above the standard, not including the additional days exempted as exceptional events such wildfires. The 24-year old form allows excessive exposure under a standard that was established to recognize the harm from daily exposures.

In conclusion, we urge the Committee and EPA to heed the Clean Air Act requirement to set both the annual and the 24-hour standards with an adequate margin on safety – including ensuring protections for the most at-risk populations and health endpoints not included in this review. Based on the information in the draft Supplement to 2019 ISA and the draft PA, the Lung Association urges EPA to strengthen the annual PM2.5 standard to 8 micrograms per cubic meter and the 24-hour standard to 25 micrograms per cubic meter.

Please act assertively and with all due speed. Lives are at stake.

Thank you for your full consideration of this testimony.