American Lung Association • American Lung Association in California

American Public Health Association • California Public Health Association – North

American Thoracic Society • California Academy of Family Physicians

Alliance of Nurses for a Healthy Environment • Healthcare Without Harm

Asthma and Allergy Foundation of America • Asthma and Allergy Network

Center for Climate Change and Health • Children's Environmental Health Network

National Association of County and City Health Officials

National Environmental Health Association

Physicians for Social Responsibility • Public Health Institute

Regional Asthma Management and Prevention

Sacramento Chapter, Physicians for Social Responsibility

San Francisco Bay Area Chapter, Physicians for Social Responsibility

Trust for America's Health

December 29, 2016

Gina McCarthy, Administrator
U. S. Environmental Protection Agency

Re: Comments on the **Proposed Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards Under the Midterm Evaluation.** Docket ID No. EPA-HQ-OAR-2015-0827. Submitted via http://www.regulations.gov

Dear Administrator McCarthy:

As representatives of the medical and public health community, our organizations write in strong support of your **Proposed Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhous Gas Emissions Standards Under the Midterm Evaluation**. We concur with the Administrator's conclusion that the model year 2022-2025 light-duty greenhouse gas standards remain appropriate under the Clean Air Act.

The impact of climate change on human health supports the strongest possible greenhouse gas standards to reduce the impacts of climate change. We believe that the record supports the proposed determination that the standards should not be less stringent. Indeed, as many of our organizations indicated in earlier comments, the evidence supported the U.S. Environmental Protection Agency strengthening the required reductions in GHG emissions going forward to adequately respond to the full nature of climate and air pollution health threats. The record indicates that vehicle technologies currently available would allow vehicles to meet and exceed the MY 2022-2025 GHG reduction standard.

The determination should be finalized as soon as possible to facilitate the implementation of the rules and ensure the climate and health benefits expected in the initial rulemaking are achieved. Furthermore, the U.S. EPA should work with the California EPA in support of more protective state and federal standards for model year 2026 and beyond to achieve even greater benefits.

Climate change poses grave threats to public health. To protect our communities and the public, the United States must significantly reduce greenhouse gases from all sources and continue to show international leadership to motivate action by other countries. The changing climate threatens the health of Americans alive now and in future generations. Growing evidence over the past few years has

demonstrated the multiple, profound risks that imperil the lives and health of millions. Consequently, the nation has a short window to act to reduce those threats.

Released earlier this year, the *Impacts of Climate Change on Human Health in the United States: A Scientific Assessment* provided the most recent summary of the research outlining these risks to the United States. This grim summary of risks to human health launches the report:

Climate change is a significant threat to the health of the American people. The impacts of human-induced climate change are increasing nationwide. Rising greenhouse gas concentrations result in increases in temperature, changes in precipitation, increases in the frequency and intensity of some extreme weather events, and rising sea levels. These climate change impacts endanger our health by affecting our food and water sources, the air we breathe, the weather we experience, and our interactions with the built and natural environments. As the climate continues to change, the risks to human health continue to grow. ¹

This review echoed reports previously produced by several of our organizations: the Asthma and Allergy Foundation of America's *Extreme Allergies and Global Warming*, issued with the National Wildlife Foundation in 2010²; the American Public Health Association's *Climate Change: Mastering the Public Health Role*, in April 2011³; and the American Thoracic Society's workshop on Climate Change and Human Health, published in 2012⁴.

Millions of Americans suffer greater vulnerability to these threats. Many people face greater risk or exposure, as documented in the large air pollution science assessments EPA has repeatedly completed. Children court special risks because their bodies are growing and because they are so active.⁵ Older adults are more likely to die during high heat events.⁶ People with chronic respiratory diseases like asthma and chronic obstructive pulmonary disease, people with cardiovascular diseases and people with diabetes also risk greater harm from increased pollution.⁷

Low-income communities and some racial and ethnic groups are among those who often confront higher exposure to pollutants and who may experience greater responses to such pollution. Many studies have explored the differences in harm from air pollution to racial or ethnic groups and people who are in a low socioeconomic position, have less education, less access to medical care, or live nearer to major pollution sources.⁸ Even healthy adults can be affected by increased air pollution, especially if their work requires them to be outdoors, as the study of lifeguards in Galveston, Texas demonstrated.⁹

Many different vulnerable groups and disadvantaged communities, including seniors, children and those with disabilities, will have a harder time responding to the threats, especially if electricity is lost or relocation or evacuation is required. Hurricane Katrina demonstrated that many people in these groups had difficulty evacuating and relocating after a major weather event. Native American and other tribal communities may face threats to food supplies and difficulty relocating due to tribal land locations.

Reducing GHG emissions from vehicles is critical in the fight against climate change. Transportation sources produced more than one quarter of the nation's GHG emissions (26 percent) in 2014. The transportation sector increased those emissions more since 1990 than any other sector, according to EPA.¹³ In 2012, the Administration launched a second phase of fleet-wide standards to reduce GHG emissions from cars, light-duty trucks, SUVs and family vans, following up on the first round in 2009. EPA

estimated that these reductions would reduce GHG emissions by 2 billion metric tons in 2025 as manufacturers phased them in beginning in 2017. Combined with vital GHG reductions scheduled for the heavy duty trucking sector, these standards are leading the way to protect against the worst impacts of climate change.

In summary, the proposed determination should be finalized now to facilitate the implementation of the rule for model years 2022-2025. Further, our organizations urge EPA to work with the California Air Resources Board in support of more protective state and federal standards for model year 2026 and beyond.

Sincerely,

American Lung Association American Lung Association in California American Public Health Association American Thoracic Society Alliance of Nurses for a Healthy Environment **Asthma and Allergy Foundation of America Asthma and Allergy Network California Academy of Family Physicians** California Public Health Association - North **Center for Climate Change and Health Children's Environmental Health Network Healthcare Without Harm National Association of County and City Health Officials National Environmental Health Association Physicians for Social Responsibility Public Health Institute Regional Asthma Management and Prevention** Sacramento Chapter, Physicians for Social Responsibility San Francisco Bay Area Chapter, Physicians for Social Responsibility Trust for America's Health

¹ US GCRP, 2016. The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Crimmins A, Balbus J, Gamble JL, Beard CB, et al. Eds. U.S. Global Change Research Program, Washington DC. http://dx.doi.org/10.7930/J0R49NQX

² National Wildlife Federation and Asthma and Allergy Foundation of America. *Extreme Allergies and Global Warming*. National Wildlife Foundation, 2010. Accessed at http://www.nwf.org/pdf/Reports/NWF Allergies Final.pdf.

³ American Public Health Association. *Climate Change: Mastering the Public Health Role. A Practical Guidebook*. April 2011. Accessed at http://www.apha-environment.org/ClimateandHealth.aspx.

⁴ Pinkerton KE et al., An Official American Thoracic Society Workshop Report: Climate change and Human Health. *Proceedings American Thoracic Society* 2012; 9: 1: 3-8.

⁵ Shea KM and the Committee on Environmental Health. Global Climate Change and Children's Health. *Pediatrics*, 2007.; 120; e1359; American Academy of Pediatrics Committee on Environmental Health, Ambient Air Pollution: health hazards to children. *Pediatrics*. 2004; 114: 1699-1707. Statement was reaffirmed in 2010.

⁶ Zanobetti A, et al. Summer temperature variability and long-term survival among elderly people with chronic disease. Proceedings of the National Academy of Sciences, 2012. 109: 6608-6613.

⁷ U.S. EPA. Integrated Science Assessment for Particulate Matter (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-08/139F, 2009; U.S. Environmental Protection Agency. *Integrated Science Assessment of Ozone and Related Photochemical Oxidants (Final Report)*. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-10/076F, 2013.

⁸ Institute of Medicine. *Toward Environmental Justice: Research, Education, and Health Policy Needs*. Washington, DC: National Academy Press, 1999; O'Neill MS, Jerrett M, Kawachi I, Levy JI, Cohen AJ, Gouveia N, Wilkinson P, Fletcher T, Cifuentes L, Schwartz J et al. Health, Wealth, and Air Pollution: Advancing Theory and Methods. *Environ Health Perspect.* 2003: 111: 1861-1870; Finkelstein MM; Jerrett M; DeLuca P; Finkelstein N; Verma DK, Chapman K, Sears MR. Relation Between Income, Air Pollution And Mortality: A Cohort Study. *CMAJ.* 2003; 169: 397-402; Ostro B, Broadwin R, Green S, Feng W, Lipsett M. Fine Particulate Air Pollution and Mortality in Nine California Counties: Results from CALFINE. *Environ Health Perspect.* 2005: 114: 29-33; Zeka A, Zanobetti A, Schwartz J. Short term effects of particulate matter on cause specific mortality: effects of lags and modification by city characteristics. *Occup Environ Med.* 2006: 62: 718-725.

⁹ Thaller EI, Petronell SA, Hochman D, Howard S, Chhikara RS, Brooks EG. Moderate Increases in Ambient PM _{2.5} and Ozone Are Associated With Lung Function Decreases in Beach Lifeguards. *J Occp Environ Med.* 2008; 50: 202-211 ¹⁰ US GCRP, 2016; APHA, 2011.

¹¹ US GCRP, 2016.

¹² US GCRP, 2016

¹³ U.S. EPA. 2016. Greenhouse Gas Inventory Report, 1990-2014. EPA 430-R-16-002. Accessed at https://www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-1990-2014.