January 5, 2018

The Honorable Scott Pruitt, Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

Attention Docket ID No. EPA–HQ– OAR–2014–0827: Proposed Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits

Dear Administrator Pruitt:

On behalf of our nation's leading medical and public health organizations, we urge you to retain and implement the current Phase 2 GHG Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Vehicles, and not to repeal the emissions requirements for glider vehicles, glider engines and glider kits. These standards will not only help to mitigate climate change and its associated health risks, but will also significantly reduce emissions of toxic and carcinogenic air pollutants, benefiting public health in communities across the country. As public health groups and medical societies, we are keenly aware of the harmful health effects of these diesel combustion air pollutants, as well as the dangers that climate change already poses to human health. We call on you to protect our patients and the public from these health harms.

GLIDER TRUCKS ARE NEW TRUCKS

In 2016, the Environmental Protection Agency closed the glider truck loophole as part of the Phase 2 GHG Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Vehicles. In that rulemaking, EPA correctly concluded that glider trucks are new motor vehicles, and should be regulated as such. EPA documented that these vehicles are marketed and sold as new trucks. ¹ EPA clearly has the authority to address glider vehicle pollution under the Clean Air Act Section 202(a)(1). Congress certainly did not intend to allow a manufacturer to avoid compliance with vehicle pollution standards by adding a used component to a vehicle. In sum, the 2016 interpretation of the statute is clearly the most consistent with the Clean Air Act, and EPA's new proposal is based on a flawed reading of the law, that failed consider the statutory text and the clearly stated purpose of the law.

GLIDER TRUCKS ARE LETHAL

EPA's proposed reopening of the 2016 loophole would have lethal consequences. In 2016, EPA estimated that closing the diesel trucks loophole would avoid up to 1,600 premature deaths over the

¹ U.S. Environmental Protection Agency and National Highway Traffic Safety Administration Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Vehicles—Phase 2. 81 Fed. Reg 73514 (October 25, 2106)

lifetime of the trucks sold in 2017 alone.² Those deaths would be prevented by the reduced emissions of nitrogen oxides (N0x) and particulate matter (PM_{2.5}). This analysis found that, by 2025, with the loophole in place, the dirty diesel trucks would create an additional 190,231 tons per year of NOx and an additional 5,064 tons per year of PM_{2.5}.³ By 2040, the dirty trucks would create an additional 318,515 tons per year of NOx and an additional 8,546 tons per year of PM_{2.5}.⁴

Further, these dirty trucks are operating with the engines that were part of what then-Administrator Carol Browner called the "biggest civil penalty ever for violating an environmental law." The recordbreaking 1998 diesel consent decree permitted the sale of non-compliant engines with emissions that were 50 percent higher than the standards until October 2002.⁵ An internal EPA memo with redacted Confidential Business Information in the docket shows that "nearly all engines from recent glider production are 1998-2002 pre-EGR engines." (EGR is an acronym for exhaust gas recirculation – a NOx pollution control technology.). The memo concludes that "a small, but significant number of 2004-2006 engines [were] used, but very few 2007 and later engines."⁶

People who live within 500 meters of a highway are the most heavily exposed to air pollution from traffic, including from dirty diesel trucks, and are therefore the most harmed by diesel truck air pollution. The Health Effects Institute estimated in 2010 that roughly 45 percent of people in North America lived close enough to face serious health risk from traffic pollution, especially from diesel emissions. Studies show that traffic pollution causes asthma attacks in children, and may cause a wide range of other effects. Evidence warns that traffic pollution may cause premature death; may impair lung function; may cause the onset of childhood asthma; and may increase the risk of cardiovascular harm.⁷ Ongoing research continues to underscore the dangers from traffic diesel exhaust. For example, only a few weeks ago, the *Lancet* medical journal published a new paper that convincingly documented, at the biological level, the lung and heart damage caused by taking a walk along a busy urban street in London, where traffic is dominated by diesel vehicles.⁸

 ² U.S. EPA and NHTSA. 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles - Phase 2: Response to Comments for Joint Rulemaking. EPA-420-R-16-901. p. 1965. Accessed at <u>https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P8IS.PDF?Dockey=P100P8IS.PDF</u>
³ EPA and NHTSA, 2016. p. 1962

⁴EPA and NHTSA, 2016. p. 1962

⁵ U.S. Environmental Protection Agency Announcement of Settlement with Heavy-Duty Diesel Manufacturers, 10/22/1998 Carol M. Browner, Administrator. Accessed at

https://archive.epa.gov/epapages/newsroom archive/speeches/8c4e850716947a808525701a0052e384.html

⁶ Charles Moulis memorandum to William Charmley, U.S. EPA. November 15, 2017. Summary Memo for Glider Production Data - Redacted Version. Accessed at <u>https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2379</u>

⁷ Health Effects Institute Panel on the Health Effects of Traffic-Related Air Pollution, *Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects.* Health Effects Institute: Boston, 2010. Available at <u>www.healtheffects.org</u>.

⁸ Sinharay R, Gong J, Barratt B, et al. 2017. <u>Respiratory and cardiovascular responses to walking down a traffic-polluted road compared with walking in a traffic-free area in participants aged 60 years and older with chronic lung or heart disease and age-matched healthy controls: a randomised, crossover study. *Lancet*. 2017 Dec</u>

^{5.} pii: S0140-6736(17)32643-0. doi: 10.1016/S0140-6736(17)32643-0. [Epub ahead of print]

In November 2017, EPA found, while running transient testing conditions, that particulate matter emissions from a dirty diesel glider truck were up to 450 times higher than a comparable 2014 or 2015 model year truck.⁹ EPA tested two "glider trucks" under highway cruise conditions and found that that NOx emissions were 43 times higher and PM emission 55 times higher than comparable model year 2014 and 2015 vehicles.¹⁰

EPA has long acknowledged that particulate matter triggers asthma attacks, heart attacks and strokes, causes premature death and is linked to low birth weight. ¹¹ EPA recently concluded that NOx causes asthma attacks and long-term exposure and has been linked to causing new cases of asthma to develop.¹² Growing evidence links NOx to an increased risk of heart attacks and premature death.¹³

DIESEL EXHAUST AND PARTICULATE MATTER ARE CARCINOGENS

In 2012, the International Agency for Research on Cancer (IARC), which is part of the World Health Organization (WHO), classified diesel engine exhaust as a Group 1 carcinogen. They concluded that there is sufficient evidence that diesel exhaust exposure is associated with an increased risk for lung cancer.¹⁴

One year later, the IARC also determined that particulate matter is a Group 1 carcinogen. Their unanimous conclusion found sufficient evidence, primarily also through an increased risk for lung cancer, for the carcinogenicity of particulate matter. ¹⁵

MODERN POLLUTION CONTROLS WORK

Since 2007, diesel trucks have been required to have diesel particulate filters. The Health Effects Institute's Advanced Collaborative Emissions Study looked at the impact of pollution controls on diesel engine emissions. The study's results, "demonstrate the effectiveness of modern after treatment

⁹ U.S. EPA. 2017. Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles. p. 3 (Hereafter referenced as Chassis Glider Final Report). Accessed at https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417

¹⁰U.S. EPA. Chassis Glider Final Report, p. 3

¹¹ U.S. EPA. 2009.Integrated Science Assessment for Particulate Matter (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-08/139F. Available at

http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=216546

¹² U.S. EPA. 2016.Integrated Science Assessment for Oxides of Nitrogen-Health Criteria (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-15/068. Available at

https://www.epa.gov/naaqs/nitrogen-dioxide-no2-primary-standards-integrated-science-assessments-currentreview.

¹³ U.S. EPA, 2016.

¹⁴ International Agency for Research on Cancer: DIESEL ENGINE EXHAUST CARCINOGENIC <u>https://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213_E.pdf</u>

¹⁵ Loomis D, et al. 2013. The Carcinogenicity of Outdoor Air Pollution. *Lancet* Oncology 14: 1262-1263; Hamra GB, Guha N, Cohen A, Laden F, Raaschou-Nielsen O, Samet JM, Vineis P, Forastiere F, Saldiva P, Yorifuji T, and Loomis D. Outdoor particulate matter exposure and lung cancer: A systematic review and meta-analysis. *Environ Health Perspect*. 2014: 122: 906-911.

technologies used in the modern diesel engines: they greatly reduce the emissions of PM, NOx, and NO2, and the levels of other toxic components."¹⁶

The investigation examined the risk of cancer in a chronic, controlled exposure study of rodents, since such a study could not be performed on humans. The study showed that "after a lifetime of exposure, [new-technology diesel exhaust] does not produce tumors in rats, unlike [traditional technology exhaust]."¹⁷

In sum, the Health Effects Institute showed that properly installed and functioning pollution controls on diesel engines work. Their conclusions are supported by real-world studies that found that these devices work to reduce diesel PM emissions even as the number of new diesel engines increases.¹⁸ These controls have helped reduce PM_{2.5} levels, particularly as demonstrated in places like California that have carefully enforced the requirements.¹⁹

CONCLUSION

EPA has clear legal authority to regulate the dirty trucks, known as "gliders," under the Clean Air Act. The Clean Air Act clearly intended for EPA to regulate these trucks as new vehicles. Reinstating the glider loophole would result in serious harm to the health of millions of Americans whom the Clean Air Act requires EPA to protect. We strongly oppose the proposed rule.

On behalf of our patients and public health in communities across the nation, we urge you to retain and implement the current Phase 2 GHG Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Vehicles.

Signed,

Allergy & Asthma Network Alliance of Nurses for Healthy Environments American Lung Association American Public Health Association American Thoracic Society

¹⁶Health Effects Institute. 2015. Executive Summary. The Advanced Collaborative Emissions Study (ACES). Boston, MA: Health Effects Institute. P. 21. Accessible at https://www.healtheffects.org/system/files/ACES-Executive-Summary2015_0.pdf

¹⁷ Health Effects Institute. 2015. p. 22.

¹⁸ Bishop GA, Schuchmann BG, Stedman DH. 2013. Heavy-duty truck emissions in the South Coast Air Basin of California. *Environ Sci Technol* 47:9523–9529; Preble CV, Dallmann TR, et al. 2015. Effects of particle filters and selective catalytic reduction on heavy-duty diesel drayage truck emissions at the Port of Oakland. *Environ Sci Technol* 49:8864-8871.

¹⁹ Propper R, Wong P, Bui S, Austin J, et al. 2015. Ambient and emission trends of toxic air contaminants in California. *Environ Sci Technol* 49:11329–11339; South Coast Air Quality Management District. 2015. MATES IV. Final Report. Multiple Air Toxics Exposure Study in the South Coast Air Basin. Diamond Bar, CA:SCAQMD. Available at www.aqmd.gov/docs/default-source/air-quality/air-toxicstudies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7

Asthma and Allergy Foundation of America Children's Environmental Health Network National Association of County and City Health Officials National Environmental Health Association National Medical Association Trust for America's Health Public Health Institute