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Foundation of America



Center for  
Climate Change & Health



CHILDREN'S  
ENVIRONMENTAL  
HEALTH  
NETWORK

February 20, 2020

The Honorable Andrew Wheeler  
Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave NW  
Washington DC 20460

Docket No. EPA-HQ-OAR-2019-0055

Dear Administrator Wheeler:

The undersigned health and medical organizations write in response to the advance notice of proposed rulemaking (ANPRM) for the Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine Standards. A carefully designed and health-protective Cleaner Truck Initiative (CTI) to control harmful emissions from the heavy-duty vehicle sector is critical to protecting human health from nearby sources of truck traffic, as well as ensure attainment of health-protective clean air standards.

We appreciate that the United States Environmental Protection Agency (EPA) is moving forward with this rule at a time when communities across the United States are grappling with unhealthy air and the need for strong, clear actions to protect their citizens. The American Lung Association's *State of the Air 2019* report found that more than four in 10 Americans – more than 141 million people – live in counties that have monitored unhealthy ozone and/or particle pollution.<sup>1</sup> There is an urgent need to comprehensively reduce in-use emissions from heavy-duty trucks to achieve health-protective air quality standards in regions across the United States, and to reduce the inequitable burdens of heavy-duty truck emissions on the nation's most vulnerable communities.

To fulfill the promise of cleaner air for all Americans, the CTI must be responsive to the clean air needs of all communities, including members of "vulnerable populations and lifestages, and in highly-impacted regions" as noted in the ANPRM.<sup>2</sup> We encourage EPA to continue to work collaboratively with the California Air Resources Board as both agencies proceed with their work

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<sup>1</sup> American Lung Association. *State of the Air 2019*. April 2019. [www.stateoftheair.org](http://www.stateoftheair.org)

<sup>2</sup> US Environmental Protection Agency. *Advanced Notice of Proposed Rulemaking. Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine Standards*. January 6, 2019. p. 5. <https://www.epa.gov/sites/production/files/2020-01/documents/cleaner-trucks-initiative-anpr-2020-01-06.pdf>

to protect the health of communities and individuals most impacted and vulnerable to the effects of heavy-duty truck emissions, including children, seniors and people with lung disease.

We also encourage EPA to complete all planned technical projects being conducted in conjunction with the CTI effort before issuing a proposal. This information is critical to informing a sound policy proposal.

***We believe that a national rule that delivers the real-world emissions reductions necessary to achieve clean, healthy air for all Americans must be the basis for judging success.*** The rule must support states' attainment of clean air standards, support reductions in greenhouse gas emissions and advanced technologies and must guard against any backsliding on particle pollution gains made to date. Our comments below respond to the ANPRM:

### **Support for Stringency Levels to Achieve Necessary Emissions Reductions in All Regions**

More than 120 million Americans reside in communities that fail to attain the 2015 ozone standards, and approximately 20 million live in communities that fail to attain particle pollution standards set in 2012.<sup>3</sup> Given the need for significant progress to attain clean air standards – standards that are not sufficiently protective – in communities across the United States, we support the development of a national standard that achieves the equivalent of a ninety percent reduction in NO<sub>x</sub> over the current standard. EPA should support the development of the California Low NO<sub>x</sub> Omnibus rule to ensure attainment in regions across the United States This level of reduction is necessary to achieve clean air standards and must be achieved through a combination of state and federal actions, ultimately allowing for a standard that achieves clean air in all regions and supports the goal of a 50-state rule.<sup>4</sup>

This level of reduction is feasible through the smart application of existing technologies and will yield significant real-world benefits across the United States at similar or lower costs to existing control technologies, according to the Manufacturers of Emissions Controls Association (MECA).<sup>5</sup> Further, California has offered a voluntary low-NO<sub>x</sub> emission standard that achieves these levels and has certified trucks at this level.<sup>6</sup> Because state-level policies alone will not address the impacts of inter-state trucking emissions, the CTI must be sufficiently stringent to meet the needs of all regions' emission reduction plans.

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<sup>3</sup> US EPA. *Summary Nonattainment Area Population Exposure Report* (current as of December 31, 2019). Accessed Jan. 28, 2020. <https://www3.epa.gov/airquality/greenbook/popexp.html>; Ozone Designations Mapping Tool available at <https://www.epa.gov/ozone-designations/ozone-designations-guidance-and-data>.

<sup>4</sup> California Air Resources Board. *Revised Proposed 2016 State Strategy for the State Implementation Plan*. p.65. "Both the Federal and California-only low-NO<sub>x</sub> standards were assumed to provide 90 percent overall NO<sub>x</sub> emission reductions from the current engine and emission control technologies...a California-only low-NO<sub>x</sub> standard would only impact a fraction of the heavy-duty activity and emissions in California." March 2017. <https://www3.arb.ca.gov/planning/sip/2016sip/rev2016statesip.pdf>

<sup>5</sup> Manufacturers of Emissions Controls Association. *Technology Feasibility for Model Year 2024 Heavy-Duty Diesel Vehicles in Meeting Lower NO<sub>x</sub> Standards*. June 2019. "Due to the combination of cost savings realized since 2010, as well as the cost reductions expected before new standards are implemented in 2024 and 2027, we estimate that the emission controls needed to meet future 0.02 g/bhp-hr standards in 2027 will cost about the same or less than MY 2010." systems. [http://www.meca.org/resources/MECA\\_MY\\_2024\\_HD\\_Low\\_NOx\\_Report\\_061019.pdf](http://www.meca.org/resources/MECA_MY_2024_HD_Low_NOx_Report_061019.pdf)

<sup>6</sup> California Air Resources Board. [Heavy Duty Low NO<sub>x</sub> webpage](#), accessed Jan 30, 2020. "To date, ten natural gas or liquefied petroleum gas engines have been certified to the optional NO<sub>x</sub> standards."



*Ozone Nonattainment Areas; 2008 and 2015 standards*

**EPA should align rulemaking goals and emissions reductions with California’s standard**

In response to the request for comment on alignment of provisions with California’s ongoing Low NOx rulemaking, we believe that an effective rule would substantively reflect the California rulemaking. In coordination with US EPA, California is developing a rule to require a more stringent engine standard, broader certification requirements, and in-use and other test procedures that support emissions controls under all duty cycles over the course of the vehicle’s life. The California rule should be designed to achieve a 90 percent NOx reduction over the current standards in 2024. To capture the benefits of cleaner trucks more quickly, EPA’s standard should align closely with the California rulemaking to ensure all regions achieve clean air standards as efficiently as possible. We look forward to dialogue with both the California and US EPA staff to ensure both rules achieve emissions reductions needed to support clean air in all regions.

**Support Strong Focus on In-Use Emission Reductions in Real-World Conditions**

Within the rule development, we encourage the EPA to continue to place significant focus and attention on updating in-use emission testing and controls to ensure real-world air quality benefits. Trucks should be tested and certified to perform at required emission control levels under all driving conditions. At present, cold starts, low-load driving conditions, idling and emission control degradation over time reduce the potential for real-world emissions benefits. As noted in the ANPRM, emissions under low-load operating conditions can account for up to half of a truck’s daily emissions. Emissions control systems must be tested and certified to achieve reductions under all operating conditions.

**Support for Zero Emission and Hybrid Trucks as NOx Reduction Opportunity**

The CTI must fully recognize the benefits of zero emissions technologies in the rule through incentives for early deployment. As states move forward with actions to accelerate the deployment of zero emission trucks, the CTI should support the ongoing growth of the zero

emission technology market<sup>7</sup> for trucks by crediting early actions.<sup>8</sup> Bringing zero emission technologies to the trucking sector as rapidly as possible is a critical component of achieving clean air, climate, and public health goals.

### **Support for Emissions Control Warranty for Full Vehicle Life**

Because truck engines can run for over a million miles, the durability of emissions controls is imperative to long-term health protection. Emissions controls must be designed to ensure in-use controls over the full life of the truck – which is well beyond current regulatory requirements. We support extending the durability requirements to ensure emissions are controlled over the full lifetime of use, and would support the most protective warranty requirements to ensure all component parts related to emission controls are covered. In 2018, the California Air Resources Board extended the warranty for heavy duty trucks to 350,000 miles with the intention of further extending the warranty for future years, noting that this interim step for the 2022 model year “still fall[s] short of reflecting the real-world longevity of modern heavy-duty vehicles.”<sup>9</sup> We would support EPA in extending the warranty to provide coverage at least as stringent as the forthcoming California program in the CTI rulemaking. Ensuring lifetime warranty coverage will support more durable manufacturing and will encourage more immediate replacement of parts by operators. Delays in replacement of emission controls that are not performing add to negative health outcomes that could be avoided by more rapid attention that a warranty could provide.

### **Close the Glider Truck Loophole**

EPA must address “glider” trucks that push old engines into new truck bodies and can produce as much pollution as much as certified 450 new trucks. In 2016, 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 and these super-polluting trucks must be brought back into the emissions control requirements to avoid unnecessary, excess risk to the health of the public. This rulemaking is an opportunity to fully close the “glider” loophole that allows these super-polluting trucks on the road.

### **Support for Strong Anti-tampering and Enforcement Provisions**

EPA should work closely with state and local air agencies to ensure well-funded, robust enforcement to ensure compliance with emission controls. Failure to inspect and maintain engines and emissions controls can lead to serious failures and increased emissions. Further, tampering with physical or electronic emissions control systems should be discouraged through enforcement actions significant enough to deter both small and large operators from tampering and defeat devices. A comprehensive system for inspection, maintenance and enforcement will support clean air protections and secure emission reductions as expected under the rule.

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<sup>7</sup> California Air Resources Board. Proposed Advanced Clean Trucks Rulemaking. Staff Presentation, Slide 5. December 2019. <https://ww3.arb.ca.gov/board/books/2019/121219/pres19-12-4.pdf>

<sup>8</sup> Northeast States Coordinated Air Use Management (NESCAUM). *Letter to California Air Resources Board Re: California Air Resources Board Advanced Clean Trucks Proposed Regulation and Initial Statement of Reasons*. “Our states are undertaking significant efforts to introduce zero emitting medium-duty and heavy-duty trucks by: providing incentives for zero emitting freight trucks, urban buses, and school buses; introducing electric shuttle and urban buses into transit fleets; demonstrating new applications such as electric refuse trucks; allocating Volkswagen settlement funds toward medium- and heavy-duty vehicle electrification; and piloting innovative approaches such as vehicle-to-grid (V2G) electric school buses.” November 2019. <https://www.arb.ca.gov/lists/com-attach/33-act2019-VDpWNQFzVGQDZAdy.pdf>

<sup>9</sup> California Air Resources Board. *Staff Current Assessment of the Technical Feasibility of Lower NOx Standards and Associated Test Procedures for 2022 and Subsequent Model Year Medium-Duty and Heavy-Duty Diesel Engines*. April 2019. [https://ww3.arb.ca.gov/msprog/hdlownox/white\\_paper\\_04182019a.pdf](https://ww3.arb.ca.gov/msprog/hdlownox/white_paper_04182019a.pdf)

### **Require Regular Inspection and Maintenance of Heavy Duty Trucks**

We support a strong continued focus on certified onboard diagnostics systems to diagnose and spur repairs of emissions controls systems. Under first-in-the-nation state law, California is now developing a comprehensive inspection and maintenance program for heavy-duty trucks. EPA should work closely with the California Air Resources Board in its development of this program as a model for a national program to require this “smog check”-style program similar to passenger vehicle requirements for regular demonstration of functional emission controls as a condition for operation.

Across the United States, Americans are suffering due to poor air quality driven in large part by the heavy-duty trucking sector. A strong, durable rule that ensures all regions are supported in achieving clean air standards is vitally important and we look forward to engaging in the upcoming rulemaking process to ensure public health protection maintains a central role.

Sincerely,

Allergy & Asthma Network  
Alliance of Nurses for Healthy Environments  
American Lung Association  
American Thoracic Society  
Association of Schools and Programs of Public Health  
Asthma and Allergy Foundation of America  
Center for Climate Change and Health  
Children’s Environmental Health Network