



October 22, 2021

Michael Regan, Administrator  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue NW  
Washington, D.C. 20460

Dr. Austin Brown  
Senior Director for Transportation Emissions  
Council on Environmental Quality  
Washington, DC

Via email

*RE: Heavy-duty Vehicle NO<sub>x</sub> Emissions Standards*

Dear Administrator Regan and Dr. Brown:

In January 2020, the U.S. Environmental Protection Agency (EPA) released its Advance Notice of Proposed Rulemaking to update standards for emissions of nitrogen oxides (NO<sub>x</sub>) from highway heavy-duty vehicles and engines.<sup>1</sup> And on August 5, 2021 President Biden called on EPA to begin “work on a rulemaking under the Clean Air Act to establish new oxides of nitrogen standards for heavy-duty engines and vehicles beginning with model year 2027 and extending through and including at least model year 2030.” We are writing to urge EPA to promptly promulgate robust limits for highway heavy-duty engines and vehicles. Any delay in proposing strong standards will result in the failure to reduce emissions beginning with model year 2027 trucks and will adversely affect public health and the environment.

In the Ozone Transport Region (OTR), NO<sub>x</sub> emissions from highway trucks are major contributors to unhealthy levels of ground-level ozone and fine particulate matter and comprise approximately 20 percent of the region’s total NO<sub>x</sub> emissions. During the 2021 ozone season, four nonattainment areas continued to monitor above the 2015 health-based ozone National Ambient Air Quality Standard (NAAQS), two areas had one-year exceedances above the 2015 ozone NAAQS, and the New York City region, the most populous metropolitan area in the nation, continued to monitor above the level of the 2008 ozone NAAQS. To address the region’s persistent air quality problems, reducing NO<sub>x</sub> from heavy-duty trucks is of the utmost importance.

California’s NO<sub>x</sub> Omnibus Regulation, approved in August of 2020, requires a 90 percent reduction in heavy-duty vehicle and engine NO<sub>x</sub> emissions by model year 2027. The Omnibus standards include a comprehensive set of revisions designed to ensure that NO<sub>x</sub> emissions from heavy-duty engines are significantly reduced from the time the vehicle/engine is first sold, until the end of its useful life. The technological feasibility of the standards has been shown by research completed by Southwest Research Institute on behalf of

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District of Columbia

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Paul J. Miller  
Executive Director

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<sup>1</sup> 85 Fed. Reg. 3306-3330 (January 21, 2020).

CARB<sup>2</sup> and the cost effectiveness of the standards has been demonstrated by the National Renewable Energy Laboratory.<sup>3</sup>

Stringent highway heavy-duty vehicle and engine NO<sub>x</sub> standards are necessary to improve health in overburdened communities that have suffered far too long from the impacts of truck pollution. Communities adjacent to congested highways, railyards, ports, and warehouses experience heavy truck traffic and trucks making frequent stops, idling, and driving slowly. Recent evidence, especially research conducted during the COVID-19 health emergency, has shown the strong negative impact of NO<sub>x</sub> emissions on health, and affecting environmental justice communities in particular. One such study found the reduction in NO<sub>x</sub> pollution during the COVID-19 lockdown was twice as large in Black, indigenous, people of color, and Latinx communities as it was in White communities, providing further evidence that reducing NO<sub>x</sub> pollution is an environment justice issue.<sup>4</sup> Another study found low-income neighborhoods and communities of color in urban areas across the U.S. experience an average of 28 percent more nitrogen dioxide pollution than higher-income and majority-White neighborhoods. The dominant driver of the disparity is diesel traffic.<sup>5</sup> Strong heavy-duty NO<sub>x</sub> standards are an important part of the solution to the health disparities that result from exposure to diesel truck emissions.

Because of the importance of heavy-duty vehicles to air quality and public health in the OTR, the Ozone Transport Commission (OTC) has consistently requested that EPA make stringent truck NO<sub>x</sub> standards one of its most urgent priorities:

1. On June 6, 2017, the OTC issued a “Statement of the Ozone Transport Commission Requesting that the United States Environmental Protection Agency Assist the States by Implementing Emission Reduction Programs to Reduce NO<sub>x</sub> Emissions from High Priority Mobile Sources,” with stricter heavy-duty NO<sub>x</sub> standards being the first listed policy action.<sup>6</sup>
2. On June 7, 2018, the OTC and the Mid-Atlantic/Northeast Visibility Union (MANE-VU) issued a joint statement “regarding expediting adoption by the U.S. Environmental Protection Agency of more protective heavy-duty engine NO<sub>x</sub> emission standards.”<sup>7</sup>
3. On August 28, 2019, the OTC and MANE-VU submitted a joint letter to EPA asking it to propose emissions standard for heavy-duty trucks in line with what CARB had already found to be technologically feasible.<sup>8</sup>

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<sup>2</sup> California Air Resources Board, “California Air Resources Board Staff Current Assessment of the Technical Feasibility of Lower NO<sub>x</sub> Standards and Associated Test Procedures for 2022 and Subsequent Model Year Medium-Duty and Heavy-Duty Diesel Engines,” April 2019.

<sup>3</sup> National Renewable Energy Laboratory, “On-Road Heavy-Duty Low-NO<sub>x</sub> Technology Cost Study,” Tech. Rept. NREL/TP-5400-76571, May 2020; <https://www.nrel.gov/docs/fy20osti/76571.pdf>.

<sup>4</sup> G. Hunter Kerr, D.L. Goldberg, and S.C. Anenberg, *COVID-19 Pandemic Reveals Persistent Disparities in Nitrogen Dioxide Pollution*, PNAS (2021) 118 (30) e2022409118; doi:10.1073/pnas.2022409118.

<sup>5</sup> M.A.G. Demetillo, C. Harkins, B.C. McDonald, P.S. Chodrow, K. Sun, and S.E. Pusede, *Space-Based Observational Constraints on NO<sub>2</sub> Air Pollution Inequality from Diesel Traffic in Major US Cities*, Geophys. Res. Lett. (2021) 48 e2021GL094333; doi:10.1029/2021GL094333.

<sup>6</sup> The 2017 OTC Statement can be accessed at [https://otcair.org/upload/Documents/Formal%20Actions/Statement%20\\_NOx%20Emissions\\_170606.pdf](https://otcair.org/upload/Documents/Formal%20Actions/Statement%20_NOx%20Emissions_170606.pdf).

<sup>7</sup> The 2018 OTC and MANE-VU statement can be accessed at [https://otcair.org/upload/Documents/Formal%20Actions/Statement\\_EPA\\_Updating\\_HDDE\\_standards\\_%2020180607.pdf](https://otcair.org/upload/Documents/Formal%20Actions/Statement_EPA_Updating_HDDE_standards_%2020180607.pdf).

<sup>8</sup> The 2019 OTC and MANE-VU letter can be accessed at <https://otcair.org/upload/Documents/Correspondence/EPA%20NOx%20Letter.pdf>.

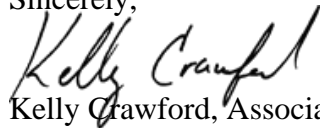
4. In February of 2020, the OTC and MANE-VU provided comments on EPA's Advanced Notice of Proposed Rulemaking calling on EPA to set emission standards for heavy-duty vehicles at 90 percent below the current standard and to harmonize with the California Omnibus program.<sup>9</sup>
5. In June of 2020, the OTC sent a letter to EPA calling on the Agency to expeditiously propose a heavy-duty engine NO<sub>x</sub> standard 90 percent below current levels.<sup>10</sup>

Additionally, the OTC has requested that EPA act to accelerate electrification of heavy-duty vehicles, require more stringent emission controls from truck glider kits, enforce against tampering of heavy-duty vehicle emission control systems, and other issues related to highway heavy-duty truck emissions.

It is our understanding that EPA will issue a notice of proposed rulemaking setting 2027 NO<sub>x</sub> standards by January 2022, and that EPA will issue a final rule by the end of 2022. As a critical public health need, it is imperative this effort remain on schedule. It is also critical that EPA's standards, including engine durability requirements and warranty provisions, be as stringent as California's. Trucks, like air pollution, cross state borders, and a strong national program is a linchpin for OTC efforts to reduce pollution from vehicles registered elsewhere that operate within the OTR.

We call on EPA to act quickly and decisively to set strong NO<sub>x</sub> emissions standards for highway heavy-duty vehicles and engines that are harmonized with California's Omnibus Regulation. It is critically needed so that jurisdictions in the OTR can attain and maintain the health-based NAAQS for ozone.

Sincerely,



Kelly Crawford, Associate Director  
Air Quality Division  
Department of Energy & Environment,  
Government of the District of Columbia  
Chair, OTC Mobile Sources Committee

cc: OTC Air Directors  
EPA OAR: Joseph Goffman  
EPA OTAQ: Sarah Dunham, Bill Charmley

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<sup>9</sup> The 2020 OTC and MANE-VU comments can be accessed at <https://otcair.org/upload/Documents/Correspondence/OTC-MANEVU%20CTI%20ANPR%20comments%2020200220%20final.pdf>.

<sup>10</sup> The 2020 OTC letter can be accessed at <https://otcair.org/upload/Documents/Correspondence/20200603%20OTC%20Letter%20to%20EPA%20MHDV%20NOx.pdf>.