August 25, 2020

Mary D. Nichols, Chair, and Board Members
California Air Resources Board
1001 I Street Sacramento, California 95814

RE: Support for a Strong Heavy-Duty Engine and Vehicle Omnibus Regulation

Dear Chair Nichols and Members of the Board,

Our undersigned organizations submit these comments in support of the California Air Resources Board's (CARB) proposed Heavy-Duty Engine and Vehicle Omnibus (Omnibus) Regulation with one recommendation that could improve the proposal. We would also like to thank the Board and staff for their many years of extensive work researching and engaging with stakeholders to inform this comprehensive rule that promises to curtail criteria pollutants from heavy-duty (HD) vehicles. HD fossil-fuel trucks are a significant source of

toxic air pollution that results in adverse health impacts, particularly in communities of color and low-income communities. We strongly believe that CARB must accelerate the transition to 100 percent zero-emission vehicles (ZEVs), however, we recognize that cutting emissions from fossil fuel vehicles that continue to be produced must be also addressed. Given the proposal's substantial emission reduction benefits, we urge the Board to adopt this regulation along with a recommended improvement.

I. Overview

HD vehicles are the single largest source of oxides of nitrogen (NOx) in California, emitting nearly a third of all NOx pollution, as well as over a fourth of diesel particulate matter (PM). NOx contributes to ozone and the formation of secondary PM, which, along with primary PM emissions (elemental black carbon), are associated with increased risk of premature deaths, hospitalization, and ER visits. Numerous respiratory and cardiovascular diseases are linked to these pollutants such as asthma, decreased lung function, heart attacks, and lung cancer.[1]

Reducing NOx and PM emissions is vital for improving public health and meeting the federal National Ambient Air Quality Standards (NAAQS) for ozone and fine particulate matter (PM2.5). Of all the strategies identified in California's legally binding 2016 State Implementation Plan (SIP) to meet the NAAQS, the Omnibus rule is expected to provide the most NOx emission benefits. Cleaning up HD vehicle emissions is long overdue for the communities living adjacent to freeways, ports, and freight hubs that disproportionately suffer from harmful air pollution. Many of these communities, which are predominantly communities of color and low-income communities, see upwards of 1,000 diesel trucks passing through per hour.[2]

To realize these emission benefits, the proposed rule makes much-needed reforms, such as lowering NOx and PM emission standards, introducing a new NOx standard for a low-load certification cycle, extending manufacturer warranties, and improving in-use testing to better align with actual operations and global standards. Moreover, the proposed emission standards derive from nearly a decade of rigorous research and analysis demonstrating that the new requirements are not only technically feasible but cost-effective methods of emissions reduction.

The proposed Omnibus rule is expected to cut NOx emissions from heavy-duty (HD) vehicles by roughly 75 percent below current standards beginning in 2024 and 90 percent in 2027. In addition to cleaning up NOx, the proposed rule looks to institutionalize

[1] http://www.stateoftheair.org/health-risks/
[2] https://www.electrictrucksnow.com/awareness-campaign-launch

particulate matter (PM) pollution controls and prevent backsliding by adopting a more stringent standard that aligns with current industry certifications. These reductions amount to $36 billion in statewide health benefits from 3,900 avoided premature deaths and 3,150 hospitalizations from 2022 to 2050.

However, the proposal could be improved to help ensure all of California's air districts meet federal NAAQS and provide the relief needed for millions of Californians still forced to breathe polluted air. The Board should approve the rule, but direct staff to make the following improvement:

- End new ZEV NOx credit generation at the end of MY 2023 and have all banked credits expire at the end of model year (MY) 2026.

II. Eliminate Zero Emission Credits After MY 2026

The Board should direct staff to reform the current HD ZEV NOx crediting provision to support early ZEV sales through MY 2023, but retire all banked credits with the end of MY 2026. As it's currently written, the rule allows manufacturers to generate NOx credits from ZEV sales to offset emissions from engines certified above the emission standard through the California-only averaging, banking, and trading program (CA-ABT). The proposed rule currently allows ZEV NOx credits through MY 2030, after which all credits are terminated. Policies to promote HD ZEV sales in the near term while the market is still nascent is understandable, however the HD ZEV market has changed dramatically over the past seven years since CARB first began developing the rule in 2013. Even in the narrow window since this proposal was released, CARB voted to adopt the Advanced Clean Truck (ACT) rule,[3] the Board set clear goals for 100 percent zero-emission truck sales,[4] and California joined 14 states in committing to accelerate the zero-emission truck and bus market.[5] CARB is also planning to vote on a clean truck purchase rule in 2021 that will require fleets to buy an increasing number of zero-emission trucks.[6] The combination of ZEV mandates along with clearly defined state objectives means the transition towards HD ZEVs will ramp up by the end of this decade, irrespective of crediting in the Omnibus rule.

Further, it is possible that higher than expected ZEV sales could cause the Omnibus rule to become overwhelmed by ZEV NOx credits, weakening the emissions standards. Critically, in the current proposal, the ZEV NOx credits can be averaged into any engine family and would have a credit life of five years or last until MY 2031—whichever comes first. Consequently, sales of Class 4 ZEV delivery trucks in MY 2026 could offset NOx emission

[3] https://ww2.arb.ca.gov/rulemaking/2019/advancedcleantrucks
[4] https://ww3.arb.ca.gov/regact/2019/act2019/finalres20-19.pdf
[5] https://www.nescaum.org/documents/multistate-truck-zev-governors-mou-20200714.pdf
[6] https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets

requirements for MY 2030 Class 8 diesel tractors. While the expressed purpose of this provision, to "incentivize production of heavy-duty ZEVs", is something we are deeply committed to, the functional outcome is to ease compliance with the Omnibus rule. To avoid an outcome where robust ZEVs sales offset emission reductions from HD fossil fuel vehicles, the proposed rule should end new ZEV NOx crediting after MY 2023 and terminate ZEV NOx credit balances after MY 2026.

III. Conclusion

At the June 25th, 2020 Board Meeting, the Board sent a clear signal that California's future truck fleet will be zero-emission by adopting the Advanced Clean Truck Rule and the following resolution language[7]:

"BE IT FURTHER RESOLVED that CARB staff continue to take steps to determine how to best achieve a **zero-emission California fleet of medium- and heavy-duty vehicles by 2045 everywhere feasible with an earlier transition for certain market segments**, including a goal of:

- Drayage trucks, last mile delivery, and government fleets: 100 percent zero emission vehicle fleets by 2035
- Refuse trucks and local buses: 100 percent zero-emission vehicle fleets by 2040
- Utility fleets: 100 percent zero-emission capable vehicles by 2040"

While the zero-emission vehicle market continues to grow, thanks in no small part to CARB's supporting policies, the share of fossil fuel trucks in California's fleet will diminish. However, now (resulting from this proposed regulation) more long-lived combustion engines will continue to be built and sold over the next several decades. Therefore, this proposed Omnibus rule is a vital complement to reduce and ultimately zero-out harmful air pollution from heavy-duty vehicles. It's also being closely followed by other nonattainment states who may want to exercise their right under the federal Clean Air Act to adopt California's emissions standards to cut emissions from heavy-duty vehicles.

The U.S. Environmental Protection Agency (EPA) is considering, among other things, a national low-NOx standard through its Cleaner Truck Initiative. However, given lead time requirements, the earliest that rulemaking would come into effect is 2027 and is currently facing additional delays. This is well beyond the timeline for when California, as well as other nonattainment states, must already be slashing criteria emissions. Importantly, the proposed Omnibus rule will push manufacturers to innovate and deploy technically feasible

[7] https://ww3.arb.ca.gov/regact/2019/act2019/finalres20-19.pdf

and cost-effective emission reduction technology sooner: charting a course for the U.S. EPA to follow and possibly resulting in a more stringent national standard.

For the reasons stated above, we firmly support the proposed Omnibus regulation and urge the Board to approve the rule and direct staff to make the aforementioned improvements. Thank you for your time and consideration.

Sincerely,

Patricio Portillo
Transportation Analyst
Natural Resources Defense Council

Bill Magavern
Policy Director
Coalition for Clean Air

Joel Ervice
Associate Director
Regional Asthma Management and Prevention

Pia Piscitelli
Public Policy Co-Chair
SanDiego350

Sherry Lear
Organizer
350 South Bay Los Angeles

John Shears
Consultant on Climate, Clean Transportation and Alternative Fuels
The Center for Energy Efficiency and Renewable Technologies

Dr. Catherine Garoupa White
Executive Director
Central Valley Air Quality Coalition

Kathy Hoang
California Campaign Manager
The Partnership for Working Families

Leslie Aguayo
Environmental Equity Program Manager
The Greenlining Institute

Nicole Kemeny
President
350 Silicon Valley

Mark Rose
Sierra Nevada Program Manager
National Parks Conservation Association (NPCA)

Tom Cackette
Environmental Defense Fund Consultant
Environmental Defense Fund