May 28, 2020

Submitted Electronically

Mary Nichols, Chair
California Air Resources Board
1001 I Street Sacramento, CA 95814

RE: The Advanced Clean Trucks Standard

Dear Chair Nichols and Members of the Board,

The Center for Biological Diversity submits this comment on the Advanced Clean Trucks (ACT) Regulation and urges the California Air Resources Board (ARB) to strengthen and adopt the Clean Trucks Regulation currently under consideration and invest in programs to ensure the fastest possible transition to 100% clean electric trucking, shipping, and green ports.

The ACT Regulation, as proposed, would implement both a sales requirement for manufacturers, with some exceptions for those who produce less 500 on-road vehicles,[1] and a reporting requirement for large employers and fleet owners.[2] Manufacturers who certify Class 2B-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2030. By 2030, zero-emission truck/chassis sales would need to be 50% of class 4 – 8 straight trucks sales and 15% of all other truck sales.[3]

The current ACT Regulation is an improvement over previous versions but should go further to address the climate emergency and clean the air we breathe. This is especially true now that long term exposure to air pollution has been linked to higher Covid-19 mortality rates[4] and especially true for those communities that already bear a disproportionate burden of pollution from truck and other vehicular traffic.[5] The transportation sector is still the largest source of GHG and NOx emissions in California,[6] and electric vehicles are a crucial lever in reducing emissions and meeting California's climate goals.

[1] California Air Resources Board, Proposed Advanced Clean Trucks Regulation, Appendix A —Proposed Regulation Order (May 1, 2020) at Section 1963(e), https://ww3.arb.ca.gov/regact/2019/act2019/30dayatta.pdf.
[2] California Air Resources Board, Advanced Clean Trucks Fact Sheet (July 2, 2019), https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet.
[3] *Ibid*.
[4] Friedman, Lisa, *New Research Links Air Pollution to Higher Coronavirus Death Rates*, N.Y. Times, April 17, 2020, https://www.nytimes.com/2020/04/07/climate/air-pollution-coronavirus-covid.html.
[5] Union of Concerned Scientists, Inequitable Exposure to Air Pollution from Vehicles in California: Who Bears the Burden? (Feb. 2019), https://www.ucsusa.org/sites/default/files/attach/2019/02/cv-air-pollution-CA-web.pdf.
[6] Nichols, Mary D., California Air Resources Board, Presentation, *Report on the Implementation of AB 197* at the AB 197 CARB Hearing (Feb. 3, 2020) at slide 5,

A stronger ACT Regulation would also assist California in meeting its climate goals. The California Global Warming Solutions Act (AB 32, Nunez & Pavley, 2006), requires that state agencies enact measures to collectively reduce GHG emissions to 80 percent below 1990 levels by 2050. In 2015, after announcing a goal of reducing current petroleum use in cars and trucks by as much as 50 percent, Governor Brown signed Executive Order B-30-15, which establishes a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030.[7] In addition, Governor Brown's E.O. B-55-18 sets a goal of carbon neutrality by 2045 and net negative emissions thereafter. Further, Executive Order (E.O.) B-16-12, codified through SB 1275 (DeLeon, 2014),[8] sets a goal of 1.5 million zero emission vehicles (ZEV) by 2025. Governor Brown's E.O. B-48-18[9] augmented these target ZEV numbers, setting a goal of 5 million ZEVs on the road by 2030 and mandating the installation of 250,000 charging stations.

Recent reports highlight the need for the state to greatly increase greenhouse reduction efforts to meet its 2030 climate goals.[10] One analysis concludes that at its current rate of progress, the state could miss its climate goals by a century.[11] In order to achieve across-the-board change on a timeline that helps the state meet its deadlines, the strongest possible ACT Regulation is needed.

The need for deep and rapid greenhouse emission reductions grows more urgent with each passing day. The world faces a climate emergency with widespread and escalating harms, driven by fossil fuel production and use.[12] Limiting the worst damages of the climate crisis requires rapidly decarbonizing our entire economy, including converting our transportation sector to 100% zero emission vehicles. The landmark 2018 IPCC *Special Report on Global Warming of 1.5°C* provided overwhelming scientific evidence for the necessity of immediate, deep greenhouse gas reductions across all sectors and underscored the high costs of inaction or delays, particularly in the next crucial decade, in making these cuts. The IPCC emphasized that limiting

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https://climatechangepolicies.legislature.ca.gov/sites/climatechangepolicies.legislature.ca.gov/files/AB197%20CARB%20Hearing%20Slides.pdf.

[7] Office of Governor Edmund G. Brown Jr., Press Release: Governor Brown Establishes Most Ambitious Greenhouse Gas Reduction Target in North America (April 29, 2015), https://www.ca.gov/archive/gov39/2015/04/29/news18938/index html.

[8] S.B. 1275, Ch. 530, 2013-2014 Reg. Sess. (Cal. 2014), *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB1275.

[9] Office of Governor Edmund G. Brown Jr., Press Release: Governor Brown Takes Action to Increase Zero-Emission Vehicles, Fund New Climate Investment (Jan. 26, 2018), https://www.ca.gov/archive/gov39/2018/01/26/governor-brown-takes-action-to-increase-zero-emission-vehicles-fund-new-climate-investments/index.html.

[10] Busch, Chris & Robbie Orvis, Insights from the California Energy Policy Simulator, Energy Innovation (Jan. 2020) at 1, https://energyinnovation.org/wp-content/uploads/2020/01/Insights-from-the-California-Energy-Policy-Simulator.pdf.

[11] Temple, James, *California is on Track to Miss Its Climate Targets — By a Century*, MIT Technology Review, Nov. 1, 2019, *available at* https://www next10.org/press-coverages/california-track-miss-its-climate-targets-century.

[12] Intergovernmental Panel on Climate Change, Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (2014), https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf; U.S. Global Change Research Program, Climate Science Special Report: Fourth National Climate Assessment, Vol. I (2017), *available at* https://science2017.globalchange.gov/; U.S. Global Change Research Program, Impacts, Risks, and Adaptation in the United States, Fourth National Climate Assessment, Volume II (2018), *available at* https://nca2018.globalchange.gov/.

warming to 1.5°C requires "rapid and far-reaching transitions" across all sectors including transport.[13] At the global level, 1.5°C pathways require global CO_2 emissions to be cut by half by 2030 and to reach near zero by 2050,[14] with steeper emissions reductions required in wealthier countries. The latest United Nations *Emissions Gap* report similarly found that global greenhouse gas emissions must drop by at least 7.6 percent per year through 2030, for a total reduction of 55% between 2020 and 2030, to keep warming below 1.5°C.[15] As the world's fifth largest economy, California has both the ability and responsibility not just to meet, but to exceed, the average reductions necessary to respond to the climate emergency.

ARB's record for this rulemaking itself demonstrates that California can transition its truck fleet in the short term *faster* than the rule requires. Additional information further supports this conclusion. California entities are investing in EVs even prior to adoption of the final rule—for example, Los Angeles reportedly purchased its first electric fire truck,[16] and Los Angeles Sanitation has pledged to transition its entire refuse truck fleet to zero emission vehicles by 2035.[17] The California Department of State Hospitals also placed an order for zero emission class 3 delivery vans earlier this year.[18] Electric delivery trucks are available today.[19]

Examples from outside the state include Germany and Sweden, which have set targets to reach approximately 25% new zero emissions public buses by 2025.[20] And in the city of Shenzhen, China, there were over 60,000 electric logistics vehicles in operation in 2018.[21]

These examples help to demonstrate the feasibility of a rapid fleet transition, but a strong rule is needed to make the needed improvements as fast as the climate and air pollution crises demand. Moreover, the rule should not rely on solely on technology available today but should instead be technology forcing, driving the development and deployment of new technology to clean our air and respond to the climate emergency. A stronger rule will also more quickly eliminate the dirty

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[13] Intergovernmental Panel on Climate Change, *Summary for Policymakers*, in Global Warming of 1.5°C, An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty (2018) at 15, *available at* https://www.ipcc.ch/sr15/.
[14] *Id.* at 12.
[15] United Nations Environment Programme Emissions Gap Report 2019, UNEP, Nairobi (2019) at XV, XX, 26, *available at* https://www.unenvironment.org/resources/emissions-gap-report-2019.
[16] Lambert, Fred, *Los Angeles City Fire Department Buys "First Electric Fire Truck in North America"*, Electrek, Feb. 12, 2020, https://electrek.co/2020/02/12/los-angeles-city-fire-department-buys-first-electric-fire-truck/.
[17] Truckinginfo, *Los Angeles Commits to 100% Electric Refuse Fleet*, Truckinginfo.com, Feb. 4, 2020, https://www.truckinginfo.com/350487/los-angeles-commits-to-100-electric-refuse-fleet.
[18] Lightning Systems, *California Department of State Hospitals Orders a Dozen Electric Cargo Vans from Lightning Systems*, Lightningsystems.com, April 7, 2020, https://lightningsystems.com/california-dept-of-state-hospitals-orders-12-electric-cargo-vans/.
[19] Downing, Shane, *8 Electric Truck and Van Companies to Watch in 2020*, GreenBiz, Jan. 13, 2020, https://www.greenbiz.com/article/8-electric-truck-and-van-companies-watch-2020.
[20] Hall, Siobhan, *EU Governments Confirm 2030 Goals for Low-CO2 Public Buses*, S&P Global Platts, June 13, 2019, https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/061319-eu-governments-confirm-2030-goals-for-low-co2-public-buses-trucks.
[21] Crow, Allison et al., A New EV Horizon: Insights from Shenzhen's Path to Global Leadership in Electric Logistics Vehicles, Rocky Mountain Institute (2019) at 14, available at https://rmi.org/insight/a-new-ev-horizon.

diesel trucks that disproportionately pollute communities of color,[22] and alleviate the alarming health impacts in these communities caused by soot and NOx emissions.

Given these realities, California should strengthen the ZEV sales requirements across vehicle classes and years, and should require a 100% ZEV fleet of local buses, refuse trucks, and first/last mile delivery trucks by 2030, instead of the 2040 goal envisioned in the ACT Regulation.[23] In addition, because many electric trucks are already market ready, CARB should also require full electric vehicles rather than relying on near electric vehicles and credits as part of the ACT Regulation fleet. Allowing auto makers to take advantage of and accrue credits for purchases of hybrid vehicles will not help California realize its climate goals. Phasing out or eliminating credits altogether would ensure that the ACT Regulation requires truly clean vehicles.

Time is of the essence. California must not fall farther behind in the race to avert the worst consequences of the climate crisis or protect public health from deadly air pollution. The ACT Regulation should take stronger steps to curb climate change and make the air breathable for all Californians.

Respectfully submitted,

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[22] Grist Creative, *Seeking Environmental Justice in California's 'diesel death zones'*, Grist.org, Jan. 10, 2020, https://grist.org/sponsored/seeking-environmental-justice-in-californias-diesel-death-zones/ (last visited May 28, 2020).

[23] California Air Resources Board, Presentation, Proposed Advanced Clean Truck Sales Regulation Potential Modifications at the California Air Resources Board Public Workshop to Discuss Potential Changes to the Proposed Advanced Clean Trucks Regulation (Feb. 20, 2020) at slide13, https://ww2.arb.ca.gov/sites/default/files/2020-02/200220presentation_ADA_0.pdf.

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