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1200 Pennsylvania Avenue NW
Washington, DC 20460

To Whom It May Concern:

The National Association of Clean Air Agencies (NACAA) offers the following comments on the U.S. Environmental Protection Agency's (EPA's) Notice of Proposed Rulemaking (NPRM), "Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards," which was published in the *Federal Register* on August 10, 2021 (86 Fed. Reg. 43,726-43,811).¹ NACAA is the national, nonpartisan, non-profit association of air pollution control agencies in 41 states, including 115 local air agencies, the District of Columbia and four territories. The air quality professionals in our member agencies have vast experience dedicated to improving air quality in the U.S. These comments are based upon that experience. The views expressed in these comments do not represent the positions of every state and local air pollution control agency in the country.

Introduction

NACAA welcomes this EPA proposal to revise greenhouse gas (GHG) emission standards for model year (MY) 2023 through 2026 light-duty vehicles (LDVs) and commends the agency for placing a top priority on seeking to rectify the 2020 rollback, under the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks" ("SAFE 2" Rule), of the 2012 National Clean Car Standards. This proposal has the potential to offer substantial benefits in the form of important emission reductions that state and local air agencies need to achieve and/or sustain public health, clean air (including attainment and maintenance of the health-based National Ambient Air Quality Standards, or NAAQS) and other environmental goals and address air quality impacts in disproportionately impacted communities. These standards would also contribute to domestic job growth, economic development and fuel security.

EPA should adopt standards sufficiently stringent to, *at a minimum*, achieve the same level of emission benefits as under the standards adopted in the 2012 rule. Since the emission standards in the 2012 rule were adopted, clean vehicle technology and performance have progressed significantly, far more than anticipated and at lower cost, making a strengthening of those standards in this rulemaking feasible.

¹ <https://www.govinfo.gov/content/pkg/FR-2021-08-10/pdf/2021-16582.pdf>

As NACAA noted in its January 2021 transition paper to the Biden Administration,² increasingly stringent standards to reduce emissions from passenger cars and light trucks are urgently needed. Such standards are critical components in an overall strategy to further reduce GHG and criteria pollutant emissions from passenger cars and light trucks, which are significant contributors to climate change as well as NAAQS nonattainment and maintenance problems in many areas of the U.S.

Further, EPA should work to ultimately return to a national program that maintains the authority preserved to California and other states under the Clean Air Act; includes light-duty vehicle emission standards that are informed by science; is protective of the climate; is developed in close collaboration with state and local air agencies, including California; protects and preserves states' rights; and delivers emission reductions essential for achieving and/or maintaining environmental and public health goals.

Need for and Importance of Far More Robust Federal Standards

The U.S. transportation sector has surpassed the manufacturing and power generation sectors as the largest source of GHG emissions in the country, representing 29 percent of total GHG emissions nationwide (see 86 Fed. Reg. 43,729). However, in numerous areas of the country, the contribution of the transportation sector is even greater, up to 40 percent or more. LDVs are the largest contributor to transportation-sector GHG emissions, at 58 percent, and are responsible for 17 percent of the total U.S. GHG inventory (see 86 Fed. Reg. 43,729) – reinforcing the need for a low-carbon path for these vehicles. That is why NACAA advocated for the tighter light-duty GHG emission standards that were adopted by EPA in 2012 for MYs 2017 through 2025

Because improving light-duty vehicle performance not only reduces GHGs, but also criteria pollutants and toxic air pollutants, many states, cities and counties across the nation were counting on the 2012 rule – both its emission standards and implementation dates – to meet their air pollution and state- or locality-specific GHG reduction goals. However, the “SAFE 2” Rule adopted in 2018 rolled back the 2012 standards, diminishing their promised benefits and co-benefits, including reductions in oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) that were contained in many states' ozone State Implementation Plans (SIPs).

In contrast, as currently proposed, EPA's revised standards are projected to result in 2.2 billion tons of avoided CO₂ emissions (see 86 Fed. Reg. 43,778), reduced gasoline consumption on the order of 290 million barrels (see 86 Fed. Reg. 43,788) and fuel-cost savings to drivers of \$120 to \$250 billion (see 86 Fed. Reg. 43,785) through 2050. The per-vehicle cost of the proposed standards to the auto industry would average \$1,044 in MY 2026 (see 86 Fed. Reg. 43,775), which would be offset by vehicle owners' fuel-cost savings, such that over the lifetime of a MY 2026 vehicle, fuel savings would outweigh the increase in vehicle cost by nearly \$900 (see 86 Fed. Reg. 43,797). Moreover, EPA states that the proposal will benefit vulnerable populations, including the very young, the elderly, communities of color and low-income, disabled and indigenous populations.

In its August 9, 2021, report, *Climate Change 2021: The Physical Basis*, a working group of the United Nations' Intergovernmental Panel on Climate Change (IPCC) concludes, “It is unequivocal that human influence has warmed the atmosphere, ocean and land” and “[h]uman influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years.” Further, it finds that “[g]lobal surface

² <https://www.4cleanair.org/wp-content/uploads/NACAA2021PresidentialTransitionDocument-01152021.pdf>

temperatures will continue to increase until at least the mid-century under all emission scenarios considered. Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in CO₂ and other greenhouse gas emissions occur in the coming decades.”³ Consistent with EPA’s 2009 Endangerment Finding for GHGs, the authors of the IPCC report emphasize that the impacts of climate change go far beyond temperature increases, to include such things as extreme heat, marine heatwaves, heavy precipitation, droughts, tropical cyclones and reductions in Arctic sea ice, snow and permafrost – all of which will increase in frequency and intensity “in direct relation” to intensifying global warming. They further report that under scenarios in which CO₂ emissions increase, ocean and land carbon sinks are anticipated to be less effective at slowing the accumulation of CO₂ in the atmosphere and, moreover, that many changes attributable to past and future GHG emissions “are irreversible for centuries to millennia,” particularly those in the ocean, ice sheets and global sea level. No region of the world appears to be immune from the harmful effects of these future increases in climate change.

In NACAA’s January 15, 2021 transition paper to the Biden-Harris Administration, the association wrote that “state and local agencies in NACAA have implemented programs that made meaningful progress towards reducing GHGs, but a strong, comprehensive federal approach is essential for providing lasting nationwide reductions, regulatory certainty and a more protective baseline for all states to meet.” This proposed rule offers an opportunity for the federal government to take a step to advance this goal.

NACAA’s Comments and Recommendations

Revised CO₂ Emission Standards

EPA has proposed grams-per-mile (grams/mile) GHG emission standards that would increase the stringency of the “SAFE 2” standards by about 10 percent in MY 2023 and 5 percent per year in MYs 2024 through 2026. The agency is also seeking comment on two alternatives to the proposed standards. For Alternative 1, EPA used the coefficients in the California Framework for the 2.7-percent effective stringency level as the basis for the MY 2023 stringency level and the 2012 rule MY 2025 standards as the basis for the MY 2026 stringency level, with linear year-over-year reductions between the two points for MYs 2024 and 2025. This alternative results in less stringent standards than EPA’s proposal. For Alternative 2, EPA used the 2012 rule standards as the basis for the MY 2023-2025 targets, with the standards continuing to increase in stringency in a linear fashion for MY 2026. Alternative 2 adopts the 2012 rule stringency levels in MY 2023 and follows the 2012 rule standard target levels through MY 2025. EPA extended the same linear average year-over-year trajectory for MYs 2023–2025 to MY 2026 for the final standards under Alternative 2, resulting in more stringent standards than EPA’s proposal. EPA is further requesting comment on MY 2026 standards that would result in fleet average levels that are 5 to 10 grams/mile more stringent than the MY 2026 standards under the proposed levels or the Alternative 1 or Alternative 2 levels.

EPA should set standards sufficiently stringent to, at a minimum, achieve the same level of emission benefits as under the final standards adopted under the 2012 rule. Further, these standards should create a pathway to 50 percent of all new passenger cars and light trucks sold in 2030 being zero-emission vehicles (ZEVs), including battery electric, plug-in hybrid electric or fuel cell electric vehicles, consistent with President Biden’s August 5, 2021, Executive Order 14037, “Strengthening American Leadership on Clean Cars and Trucks,”⁴ as well as lay the foundation for achieving, nationwide, a goal of 100 percent zero-emission new car and light truck sales by 2035, as is being pursued by countries such as

³ <https://www.ipcc.ch/report/ar6/wg1/>

⁴ <https://www.govinfo.gov/content/pkg/FR-2021-08-10/pdf/2021-17121.pdf>

Canada, the United Kingdom, Norway and the Netherlands as well as several states, including California, Massachusetts, New Jersey and New York, and various automakers.

EPA touts in this proposal the “proliferation of recent announcements by automakers [that] signals a rapidly growing shift in investment away from internal-combustion technologies and toward high levels of electrification. These automaker announcements are supported by continued advances in automotive electrification technologies, and further driven by the need to compete in a global market as other countries implement aggressive zero-emission transportation policies.” By way of example, EPA cites announcements made this year by General Motors, Volvo, Volkswagen, Honda, Ford, Fiat, Stellantis and Mercedes-Benz (see 86 Fed. Reg. 43,729-30).

However, EPA does not reflect the impacts of these commitments in the standards it proposes. Instead, the agency acknowledges in the proposal that the technologies needed to meet the proposed standards are already widely available and in use on vehicles, that very little electrification is necessary and that there is no need for development of new technologies for the timeframe of the proposed standards. Further, EPA states that rather than necessitating new technology, compliance with the proposed standards will necessitate greater implementation and pace of technology penetration through MY 2026 using existing GHG reduction technologies. Instead of this approach, which fails to take advantage of the already-planned availability of ZEVs, EPA should increase deployment of ZEVs and more ambitiously build on technology readiness rather than allow it to serve as the ceiling for the proposed standards.

EPA’s Alternative 2, augmented with a MY 2026 standard that is 10 grams/mile more stringent, comes the closest to NACAA’s recommendation of adopting standards sufficiently stringent to, at a *minimum*, achieve the same level of emission benefits as under the final standards adopted under the 2012 rule and put the nation on a clear trajectory to 50 percent of all new passenger cars and light trucks sold in 2030, and 100 percent of those sold in 2035, being ZEVs.

In the nine years since EPA adopted the emission standards in the 2012 rule there has been a significant expansion of ZEV technology and improvement in emissions performance. This progress has far exceeded what was anticipated in 2012 and has occurred at a lower cost than projected, thus supporting the feasibility of strengthening of the 2012 standards in this rule. In addition to these technology and performance improvements, other noteworthy factors lend further support for more stringent standards, including multiple studies and reports highlighting increasingly dire consequences of climate change; the increasing occurrence of climate-driven disasters; commitments by numerous auto manufacturers to strong electrification and ZEV targets and reductions in carbon emissions; commitments by numerous countries and U.S. states to accelerate the transition to a zero-emission transportation future; and the Biden Administration’s “Build Back Better agenda” as well as its ZEV commitments and intention to increase the United States’ Nationally Determined Contribution for the upcoming COP-26.

Many state and local air agencies were counting on the benefits of the 2012 rule and nine years later these reductions are still urgently needed. EPA should do everything possible to recapture those benefits – including those related to climate change, ground-level ozone and particulate matter. Importantly, the record on which this proposal is based supports the technological feasibility, within the MY 2023 through 2026 timeframe, of standards at least as stringent as those in the proposal. Automakers have been successfully planning to meet the standards adopted in 2012 for nearly 10 years, as illustrated by the progress and commitments they have made, thus ensuring that there is more than adequate lead time available to meet the stringency of standards we recommend.

EPA also flags this issue in the NPRM: “For on-road light duty vehicles, the proposed standards would reduce total non-GHG emissions, though we expect small increases in some non-GHG emissions in the years immediately following implementation of the proposal, followed by growing decreases in emissions in later years. This is due to our assumptions about increased ‘rebound’ driving” (see 86 Fed. Reg. 43,802). Among the pollutants for which these short-term tailpipe emission increases are expected are NO_x and VOCs, both of which are ozone precursors (see 86 Fed. Reg. 43,780). Currently, more than 120 million people live in areas around the country that do not meet the federal, health-based standards for ozone. Millions more live in areas that are on the cusp of exceeding the ozone NAAQS and tipping into nonattainment.

While the effects from “rebound driving” and sales responses to price changes (referred to as elasticity) are uncertain and the available evidence suggests they may be overstated by EPA, the initial NO_x and VOC emission increases estimated by EPA under its assumptions are relatively small and would be outweighed by reductions within a few years. States and local areas with ozone attainment and maintenance obligations cannot afford increases in NO_x and VOC emissions, particularly from a sector over which they have no regulatory authority. This is true in general and, in particular, for communities along highways and freeways, which are likely to bear a disproportionate share of adverse environmental and public health impacts. While NACAA strongly supports EPA’s efforts to enact LDV GHG emission standards that are far more rigorous than the existing standards, such action should not impede public health imperatives underlying the NAAQS. Among other things, EPA should expeditiously pursue additional federal measures to reduce NO_x and VOC emissions, including for mobile sources such as heavy-duty trucks, locomotives, aircraft and ocean-going vessels.

Clean Technology

NACAA supports LDV clean technology, investments in building the infrastructure needed to support this clean technology and steps taken to facilitate this clean technology. States and localities across the country are investing considerable resources to proactively pursue policies and programs to advance and support deployment of clean vehicle technologies in order to achieve their clean air, GHG emission reduction and public health goals. Such state and local initiatives fully support NACAA’s request that EPA can and should include in the final rule aggressive steps to support the widescale deployment of ZEVs.

By way of example, the *Drive Clean Louisville* team plans for and explores opportunities for electric vehicles and clean fuel transportation within the local government and community through the development of grant funding opportunities and policies focused on reducing tailpipe emissions from light- and heavy-duty mobile sources throughout the metropolitan area. Strategies include ones to increase cleaner alternatives to fossil fuels and/or engines that incorporate the most effective emission control technologies. Among the specific projects under this program is the *Green Fleet Challenge*, under which the Louisville Metro Government seeks to collaborate with local businesses and organizations to collectively increase the number of battery electric vehicles (BEVs) or plug-in hybrid vehicles (PHEVs) in their respective fleets (for larger entities, Louisville is asking partners to match the local government fleet at least one-to-one). These efforts will help Louisville achieve its goals of reducing GHG emissions by 80 percent by 2050 and attaining the ozone NAAQS to protect public health.⁵

⁵ <https://louisvilleky.gov/government/air-pollution-control-district/drive-clean-louisville>

The state of Minnesota is supporting the growth of electric vehicles through a variety of investments and outreach and education efforts. To date, the Minnesota Pollution Control Agency (MPCA) has dedicated the full 15 percent of funds allowed under the Volkswagen settlement fund to electric vehicle (EV) charging infrastructure and has allocated \$13.2 million of its VW settlement funds to heavy-duty vehicle electrification. In 2019, the MPCA offered \$170,000 in grants for EV charging stations at businesses that wanted to electrify their fleet vehicles. The Minnesota Department of Transportation (MnDOT) also launched a Clean Transportation Pilot Program, offering \$2 million annually to support innovative projects that reduce GHG emissions, including potential electrification projects. In fall of 2019, MnDOT began offering an EV incentive through the MnPASS program, which allows transit buses, motorcycles and vehicles with two or more occupants to use express lanes for free during peak travel times; solo motorists are allowed to pay a fee to use these lanes. This pilot program will also give Minnesotans who purchase or lease a new or used BEV or PHEV a one-time credit (\$250 for a BEV and \$125 for a PHEV) for use in MnPASS lanes. The Minnesota Public Utilities Commission (MPUC) opened a docket to discuss EV programs and potential effects for Minnesota. MPUC directed utilities to develop EV pilot programs and rates that encourage charging EVs during hours when electricity demand is otherwise low. The MPUC process and development of utility programs is ongoing. Finally, many groups around the state are working to educate consumers and support local governments and businesses in converting their vehicle fleets. *Drive Electric Minnesota* is a public-private partnership working to educate Minnesotans about the benefits of EVs and support EV-friendly legislation in the state. This partnership also supports *Communities Charging Ahead*, which helps local governments plan for and advance electrification in their communities. The Twin Cities Clean Cities Coalition and Midwest Electric Vehicle Opportunities: Learning, Events, Experience (known as *Midwest EVOLVE*) puts on ride and drive events around the state to help familiarize people with EVs. The American Lung Association of Minnesota has also been working actively to educate light-duty EV customers and plan ride and drive events for heavy-duty and medium-duty EVs.

Ventura County Air Pollution Control District (VCAPCD) operates several programs and participates collaboratively in others with nearby counties to support EV adoption and infrastructure deployment. In-house programs include 1) the state-sponsored Carl Moyer Memorial Air Quality Standards Attainment Program, under which incentive funding (50 to 75 percent of eligible costs) is provided for publicly available EV charging stations and workplace charging; 2) AB 923 DMV Fees, under which local DMV fees added for vehicle registration can be used to fund incentives for EV infrastructure similar to the Carl Moyer Program; 3) the Community Air Protection Program – another state-sponsored program – this one targeting disadvantaged and low-income communities using the Carl Moyer Program guidelines for EV infrastructure incentives; and 4) the Clean Air Fund – a 100-percent local program funded by an endowment that generates approximately \$30,000 per year – that in the past has provided funding for several EV charging stations in locations owned by the City of Thousand Oaks, some public (e.g., in parks, the municipal center) and others for the city fleet. Collaborative programs in which VCAPCD participates include 1) Electric Drive 805 (of which VCAPCD is a founding partner and steering committee member), a coalition dedicated to achieving a rapid, equitable transition to plug-in electric vehicles to reduce pollution from cars and trucks in the region; 2) the California Electric Vehicle Infrastructure Project, which offers incentives for the purchase and installation of electric vehicle charging infrastructure at publicly accessible sites throughout California; and 3) South Central Coast Incentive Project, for which VCAPCD is a funding

partner with other air districts and community choice aggregate clean power suppliers in Santa Barbara and San Luis Obispo Counties.^{6,7,8}

New Jersey provides the most generous EV purchase incentives in the country for passenger vehicles. The *Charge Up New Jersey* program offers an incentive of up to \$5,000 for the purchase or lease of a new EV with an MSRP of less than \$55,000. Both pure BEVs and PHEVs are eligible for the rebate. Zero-emission vehicles are exempt from the New Jersey state sales tax, so state residents will save 6.625 percent on the purchase or lease of a new or pre-owned pure BEV. *It Pay\$ to Plug In*, the inaugural EV charging station grant program of the state's Department of Environmental Protection, has funded over \$10 million in charging stations: \$5.4 million for DC fast chargers and \$4.6 million for Level 2 chargers. In addition, the New Jersey Board of Public Utilities established minimum requirements for utility filings regarding light-duty, publicly accessible EV charging infrastructure. Thus far, two of the state's four utilities have approved programs: \$20.7 million for Atlantic City Electric and \$166.2 million for Public Service Electric and Gas.

More examples are provided in an April 21, 2021 letter to President Biden, in which a bipartisan coalition of Governors from 12 states – California, Connecticut, Hawaii, Maine, Massachusetts, New Jersey, New York, New Mexico, North Carolina, Oregon, Rhode Island and Washington – describes actions taken within their respective states to move “quickly towards a zero-emission transportation future [that] will protect the health of all communities.”⁹

As many states and localities continue to make significant investments and put forth bold efforts to ready the market to deploy LDV clean technology, we look to and encourage the federal government to step up and increase such efforts as well, and to use this rulemaking to, at a minimum, adopt EPA's Alternative 2, augmented with a MY 2026 standard that is 10 grams/mile more stringent, so that, together, we can create a pathway that will not only reduce air pollution and protect public health and the environment, but also create high-paying jobs, spur economic development and contribute to fuel security in our nation.

ZEV Multipliers

EPA includes in the proposal an extension of the advanced technology vehicle multiplier incentives for MYs 2022 through 2025 with a cumulative credit cap. The level of this cap will depend on each automaker's actual fleet, specifically, what vehicles will become EVs and the footprint(s) of those vehicles compared to the fleet target, with a multiplier added.

Consistent with NACAA's recommendation above, to, at a minimum, restore the emissions benefits of the 2012 rule, EPA should reduce the multiplier to set it at a level that protects the rigor of the standards while still driving increased levels of EVs into the market beyond what manufacturers are likely to deliver without additional incentives.

⁶ http://www.vcapcd.org/grant_programs.htm

⁷ <https://www.electricdrive805.org/>

⁸ <https://calevip.org/incentive-project/south-central-coast>

⁹ <https://portal.ct.gov/-/media/Office-of-the-Governor/News/2021/20210421-Governors-letter-on-emissions.pdf>

Technological Readiness of the Auto Industry in Meeting Revised GHG Standards

NACAA agrees with EPA's assessment, in Section VI(A)(1) of the proposal, of the technological readiness of automakers to meet revised GHG emission standards beginning in MY 2023 and ramping up through 2026: "...the technologies needed to meet the proposed standards are already widely available and in use on vehicles – there is no need for development of new technologies for the time frame of these proposed standards. Instead, compliance with the proposed standards will necessitate greater implementation and pace of technology penetration through MY2026 using existing GHG reduction technologies. In addition, as we discuss further below, our assessment shows that a large portion of the current fleet (MY2021 vehicles), across a wide range of vehicle segments, already meets their proposed MY2023 footprint-based CO₂ targets" (see 86 Fed. Reg. 43,781). Given this level of readiness, EPA should enact more ambitious emission standards, as NACAA recommends above.

Future Longer-Term Action to Further Reduce LDV Emissions in 2027 and Beyond

In his August 5, 2021, Executive Order 14037, "Strengthening American Leadership on Clean Cars and Trucks," President Biden directs EPA to begin work on another rule under the Clean Air Act to establish new multi-pollutant emission standards, including for GHGs, for light- and medium-duty vehicles beginning with MY 2027 and extending through at least MY 2030, with a final rule due no later than July 2024 (see 86 Fed. Reg. 45,583-45,584). EPA characterizes the current NPRM as "a critical building block for a comprehensive, multipollutant longer-term regulatory program implementing EPA's statutory authority under the CAA" and writes that the agency "anticipates that the design of a future, longer-term program beyond 2026 will incorporate accelerating advances in zero-emission technologies" (see 86 Fed Reg 43,729).

NACAA supports such a second rulemaking for future longer-term actions to further reduce LDV emissions – GHG, criteria pollutant and air toxics – and advance penetration of EVs into the market, beginning with MY 2027 and extending through at least MY 2030, to lead to 50 percent of all new passenger cars and light trucks sold in 2030, and 100 percent of those sold in 2035, being ZEVs.

EPA should begin work on this second rule now. The California Air Resources Board expects to finalize its next phase of LDV emission standards next year. NACAA recommends that EPA issue an Advance Notice of Proposed Rulemaking by no later than mid-2022, take comments and input and initiate a robust discussion to inform this subsequent regulatory effort.

Overall, EPA should ultimately return to a national program that maintains the authority preserved to California and other states under the Clean Air Act; includes light-duty vehicle emission standards that are informed by science; is protective of the climate; is developed in close collaboration with state and local air agencies, including California; protects and preserves states' rights; and delivers emission reductions essential for achieving and/or maintaining environmental and public health goals.

Impact of This Rule on Environmental Justice

NACAA also challenges EPA to more fully embrace its charge on environmental justice. Across many jurisdictions, air pollution from vehicles disproportionately harms communities of color and lower income communities. For SIP planning, states need the support of strong federal standards to reduce emissions associated with light-duty vehicles. This final rule should deliver stringent federal standards

needed to reduce emissions, including in environmental justice communities that have been disproportionately impacted for far too long. Emission standards for LDVs consistent with the recommendations NACAA makes in these comments will also support state and local work towards achieving just environmental outcomes. EPA should provide more specific information about, if not an actual quantification of, the emissions impacts on disadvantaged communities.

Conclusion

NACAA appreciates the opportunity to comment on this very important and welcome action and thanks EPA in advance for considering the association's recommendations. If you have questions, please contact either of us or Nancy Kruger, Deputy Director of NACAA.

Sincerely,



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