

Office of the General Counsel

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Submitted Electronically

Environmental Protection Agency EPA Docket Center (EPA/DC) Air and Radiation Docket Mail Code 28221T 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

Re: Rulemaking to Revise Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards - Docket ID No. EPA-HQ-OAR-2018-0283

Dear Sir or Madam:

On behalf of the United States Conference of Catholic Bishops (USCCB), we submit the following comments on the proposed "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks" (SAFE Vehicles Rule). 83 Fed. Reg. 42986 (Aug. 24, 2018).

The care for creation, a critical component of Catholic social teaching and the work of the USCCB, requires a deep awareness of the interactions between environmental, social, and economic realities. To live in right relationship with God, with others, and with the earth requires that resources are consumed with prudence and that human creativity is employed to serve others, especially the most vulnerable. As Pope Benedict XVI taught, "[t]echnology...is a response to God's command to till and to keep the land."¹ The automobile is one of the most iconic examples of this call and has provided great benefit to society. At the same time, the automobile has had a significant adverse effect on the earth, especially in terms of air pollution. The transportation sector is now the largest source of greenhouse gas emissions in the United States, even as vehicle emissions continue to increase due to increasing demand for travel.

The proposed SAFE Vehicles Rule would replace the existing national program for federal greenhouse gas (GHG) emissions and corporate average fuel economy (CAFE) standards, thereby weakening the current standards and allowing cars to emit more pollution and consume more fuel.

¹ Caritas in Veritate (2009), no. 69.

One of the primary justifications made by the agencies for the SAFE rule is that it would improve public safety, specifically by decreasing on-road fatalities. 83 Fed. Reg. at 42995. While this should be a serious consideration with any policy involving vehicles, there is concern that the agencies do not consider the public safety effect in a comprehensive way. Public safety as it relates to vehicles depends both on the safety of vehicles themselves—which concerns injuries and fatalities resulting from accidents—and on other factors such as emissions of air pollutants that result from widespread vehicle use and fossil fuel production. The public health impact of these factors is noteworthy in terms of both criteria air pollutants, such as fine particulate matter or nitrogen oxides that can cause serious short-term health effects, and greenhouse gases, such as carbon dioxide that contribute to the longer-term health and safety effects associated with climate change.

Given this background, our concerns with the proposed rule rest in two main areas: the agencies' assumptions about vehicle safety, and the agencies' failure to consider adequately the effects of vehicle emissions.

Vehicle Technology & Safety

One of the key components of the agencies' claim that the current standards would be detrimental to public safety rests in the assumption that companies will decrease the weight of vehicles to increase efficiency, and that these changes will subsequently increase the risk of fatalities in collisions. While it is true that lightweighting is one effective method to increase fuel efficiency and reduce emissions, the relation between vehicle weight and fatality risk is more complicated than the agencies currently suggest. The agencies found in the 2016 Draft Technical Assessment Report that lightweighting has different effects on societal fatalities depending on what type of vehicle is considered. Lightweighting passenger cars is expected to result in a slight increase in societal fatalities per vehicle miles travled (VMT), yet lightweighting SUVs, CUVs, minivans, and light-duty trucks is expected to decrease risk of fatalities.² When the issue is considered in terms of the overall weight distribution of all vehicles on the road, a recent study found that lightweighting decreases the risk of fatalities overall.³ In other words, as vehicles are lightweighted and the difference in weight between heavy vehicles and light vehicles decreases, so does societal fatality risk.

Given that the exact makeup of the vehicle fleet is variable and difficult to predict, these varying results of lightweighting by vehicle type is still a serious concern, as the agencies claim. Yet the appropriate response is not necessarily to weaken the current standards, but to consider alternatives that do not increase risk of fatalities. One of these options may be to incentivize lightweighting only the heaviest vehicles, which, it would seem, would not only increase vehicle safety but also help meet current fuel and emissions standards. Additional flexibility could also be provided to lighter vehicles to comply with the standards.

² Draft Technical Assessment Report: Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards for Model Years 2022-2025 (July 2016), 8-21

³ Bento, Antonio, Kenneth Gillingham, and Kevin Roth. The effect of fuel economy standards on vehicle weight dispersion and accident fatalities. No. w23340. National Bureau of Economic Research, 2017.

It should also be noted that despite the relationship between weight reduction and fatality risk, the historical data reflects the trend throughout the history of the CAFE standards that fatalities have decreased on average as the standards have increased in stringency.⁴ The analysis for the proposed standards acknowledges as much, stating that "vehicle safety has steadily improved over the past several decades, and given the advanced safety technologies under current development, we would expect some continuation of improvement in MY vehicle safety over the near and midterm future." 83 Fed. Reg. at 43142. While it should not be assumed that this trend will necessarily continue throughout the lifetime of the current standards, the trend is further evidence that it is possible for the current standards to be maintained while also increasing vehicle safety.

Furthermore, any concern over the risk posed by lightweighting vehicles, however legitimate, should not justify weakening the current standards, especially given the wide range of other technologies available to achieve fuel efficiency and emissions reductions that do not involve lightweighting. In the Technical Assessment Report of 2016, the agencies found that technologies "have continued to evolve and are now being applied in ways that were not expected or considered at the time of the [2017-2025 final rulemaking (FRM)] analysis."⁵ They found that "still other technologies have emerged since the FRM analysis, which were previously thought to be beyond the 2017-2025 MY timeframe, but now appear promising or even likely due to further innovation and development."⁶ These advances in technology provide additional support for the proposition that the current standards are achievable through safe means.

One key area of technology on which the agencies are seeking comment is the program that accounts for greenhouse gas emissions due to leakage from air conditioning systems in vehicles. As reducing greenhouse gas emissions from air conditioning leaks does not affect fuel economy, the agencies are proposing to discontinue this program in order to harmonize the emissions program with the CAFE program. 83 Fed. Reg. at 42988. Yet the importance of this program has been previously emphasized by the agencies in their finding that it "would lead to significant reductions in GHGs from reduced A/C refrigerant leakage and from industry adoption of lower global warming potential (GWP) refrigerants."⁷ The agencies further stated that "these technologies will continue to expand and play an increasing role in overall vehicle GHG reductions and regulatory compliance."⁸ Given the importance of this program in achieving GHG reductions, this program should be retained to provide an additional pathway for companies to comply with the current emissions standards. The fact that this technology has no bearing on fuel economy does not justify eliminating an important element of GHG reduction.

Finally, given the costs of the technologies that can allow manufacturers to produce more efficient vehicles, there is some concern over how this may impact low-income individuals. While average new vehicle costs are expected to increase slightly, the agencies do not assess the impact

⁴ Ibid.

⁵ Draft Technical Assessment Report, 5-7

⁶ Ibid.

⁷ Ibid., 5-208

⁸ Ibid., 5-208

of the proposed standards on low-income individuals, specifically in terms of increased fuel costs due to less efficient vehicles. Previous EPA analyses identified research that found that people with low-income on average spent a much greater portion of their income on gasoline than on car payments, whether the vehicles were new or used.⁹ This indicates that the proposed rule—which would decrease vehicle efficiency and increase fuel consumption—is likely to cause more financial burdens on the poor and vulnerable.

Vehicle Emissions

A consideration of the public safety of any set of vehicle standards would be incomplete without giving significant weight to the effect of air pollution. In this area, the proposed rule clearly fails to promote public health and safety.

Criteria Air Pollutant Emissions

The EPA has previously found that "[t]he vehicles that are subject to this program are also significant sources of mobile source air pollution such as directly emitted Particulate Matter (PM), Nitrogen Oxide (NO_X), Volatile Organic Chemicals (VOCs) and air toxics."¹⁰ The EPA's analysis of the proposed rule finds that total emissions of so-called "criteria air pollutants," including PM, NO_x, VOCs, and sulfur dioxide (SO₂) will, in fact, increase if this proposal is enacted. More specifically, in 2035 the EPA estimates that there would be an increase of more than 8,000 metric tons of SO₂, more than 9,000 tons of VOC, more than 200 tons of PM, and more than 100 tons of NO_x as compared to the current standards. 83 Fed. Reg. at 43332. These increases are primarily the result of increased production and consumption of fuel resulting from standards that allow for less efficient vehicles. As the proposal acknowledges, "each gallon of gasoline produced for consumption by the on-road fleet has associated 'upstream' emissions that occur in the extraction, transportation, refining, and distribution of the fuel." 83 Fed. Reg. at 43187. Under this proposal, the upstream emissions of carbon monoxide (CO), VOCs, NO_x, and SO₂ will each increase by thousands of metric tons, according to EPA's analysis. 83 Fed. Reg. at 43332.

The health effects of these air pollutants are significant, as the agencies have acknowledged. Regarding particulate matter, the agencies note "that 'a causal relationship exists' between both long and short-term exposures to PM_{2.5} and premature mortality and cardiovascular effects." 83 Fed. Reg. at 43336. They further note that "there is evidence 'suggestive of a causal relationship' between long-term PM_{2.5} exposures and other health effects, including developmental and reproductive effects (e.g., low birth weight, infant mortality) and carcinogenic, mutagenic, and genotoxic effects (e.g., lung cancer mortality)." *Id*.

Regarding sulfur dioxide, this pollutant has "long been known to cause adverse respiratory health effects, particularly among individuals with asthma. In addition to those with asthma (both children and adults), potentially at-risk lifestages include all children and the elderly." 83 Fed.

⁹ Ibid., 6-16

¹⁰ Joint Technical Support Document: Final Rulemaking for 2017–2025 Light-Duty Vehicle Greenhouse Gas Emission and Corporate Average Fuel Economy Standards, U.S. EPA, National Highway Traffic Safety Administration at 3–36

Reg. at 43338. Additionally, the EPA has determined "that the overall evidence is suggestive of a causal relationship between short-term exposure to SO₂ and mortality." *Id.*

Ground-level ozone pollution, which is formed through reactions involving VOCs and NO_x—both of which would increase because of the proposed rule—the health effects are also significant. The EPA has found that:

"respiratory effects, including lung function decrements, pulmonary inflammation, exacerbation of asthma, respiratory-related hospital admissions, and mortality, are causally associated with ozone exposure. It also concludes that cardiovascular effects, including decreased cardiac function and increased vascular disease, and total mortality are likely to be causally associated with short-term exposure to ozone, and that evidence is suggestive of a causal relationship between central nervous system effects and short-term exposure to ozone."

83 Fed. Reg. at 43337. The EPA has also found the health effects of carbon monoxide emissions to be significant. They have determined that "a causal relationship is likely to exist between short-term exposures to CO and cardiovascular morbidity." 83 Fed. Reg. at 43339.

Finally, it is of utmost importance to consider how the above air pollutants disproportionately affect the most vulnerable populations. As mentioned above, adverse health effects from pollution exposure often affect children, especially those in utero and infants, and the elderly most severely. Additionally, the agencies note that "there is substantial evidence that people who live or attend school near major roadways are more likely to be non-white, Hispanic ethnicity, and/or low SES [socioeconomic status]." 83 Fed. Reg. at 43346. Since "concentrations of many air pollutants are elevated near high-traffic roadways," low-income individuals and people of color disproportionately bear the adverse health effects related to vehicle emissions. 83 Fed. Reg. at 43345. Consequently, the proposed rule gives rise to some serious environmental justice concerns.

Greenhouse Gas Emissions

In addition to the increased emissions of the pollutants listed above, the proposed rule is also estimated to increase emissions of carbon dioxide and other greenhouse gases (including NO_x). As compared to the current standards, vehicles produced in compliance with the proposed standards from 2021-2026 are expected to cumulatively emit 159 million more metric tons of CO₂, 1.54 million more metric tons of methane (CH₄), and 23.3 thousand more metric tons of nitrous oxide (N₂O). 83 Fed. Reg. at 43329.

Unlike the above pollutants, which can be directly harmful when inhaled in certain quantities, CO₂ is a non-toxic gas. Yet it still has significant health implications, particularly in relation to climate change. The EPA has determined that six greenhouse gases—including carbon dioxide and nitrogen oxides, which are expected to increase under this proposal—"endanger both the public health and the public welfare of current and future generations." 74 Fed. Reg. 66496 (Dec. 15, 2009). More specifically, the EPA has previously stated that "climate change 'threatens human health and well-being in many ways, including impacts from increased extreme weather events, wildfire, decreased air quality, threats to mental health, and illnesses transmitted by food,

water, and disease-carriers such as mosquitoes and ticks.¹¹¹ In this regard, by proposing this rule the EPA fails to fulfill its responsibility by law to protect human health and the environment.

The EPA previously estimated that the cumulative net benefits from the reductions in greenhouse gas emissions resulting from the 2021-2025 standards would total between \$80 and \$131 billion in value.¹² Since the proposed standards forego the planned increases in fuel efficiency stringency that the current standards mandate for the above years, it is reasonable to suggest that these benefits—which largely consist of health costs avoided—will also be foregone if the proposed standards were implemented.

It is important to note that while the proposed rule estimates the number of fatalities expected due to changes in vehicle design and usage, it does not give equal consideration to the estimated deaths that could result from the expected increase in air pollution. Though the effects of air pollution may be less noticeable than car accidents, the threat of air pollution is clear and should not be overlooked.

Finally, as in the case of criteria air pollutants, the increase of greenhouse gas emissions will also have disproportionate impacts, since "certain populations are particularly vulnerable to climate change" including "those with low income, some communities of color, immigrant groups, indigenous peoples, pregnant women, vulnerable occupational groups, persons with disabilities, and persons with preexisting or chronic medical conditions."¹³ This unfortunate reality suggests that the more just alternative in this case is the one that does not risk exacerbating the climate crisis.

California waiver

Finally, a secondary but crucial dimension of the proposed rule considers revoking California's Clean Air Act Preemption Waiver. The agencies argue that the waiver is not appropriate, partly because carbon dioxide was not an intended target of the provision in the Clean Air Act allowing the EPA to grant a waiver to California to set its own vehicle emissions standards. While this may be true, the EPA affirmed in 2013 that "Congress intended to provide California the broadest possible discretion to develop its motor vehicle emissions program. Neither the text nor the legislative history of [the Clean Air Act's] section 209(b) indicates that Congress intended to limit this broad discretion to a certain kind of air pollution problem, or to take away all discretion with respect to global air pollution problems." 78 Fed. Reg. at 2127. This view was previously upheld in federal court, which determined that "Congress created the waiver provision so that 'California could enforce emission control standards which it determined to be in its own best interest." *Motor Equipment Manufacturers Association v. Nichols*, 142 F.3d 449 (D.C. Cir. 1998).

¹¹ Draft Technical Assessment Report, 1-13

¹² Ibid., 12-65

¹³ Ibid., 1-14

Conclusion

For the reasons stated here, we ask that the agency reconsider its preferred alternative outlined in the proposed rule. Of the alternatives outlined by the agencies, the USCCB's preferred alternative is the baseline / no-action alternative, thus maintaining the current standards, because this option appears to be the best for public health and safety. If any modifications are made to existing fuel efficiency and greenhouse gas emission standards, we would urge these standards be strengthened, not weakened, to further protect human and environmental health.

Respectfully submitted,

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