



**South Coast
Air Quality Management District**

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Office of the Executive Officer

Wayne Nastri

909.396.2100, fax 909.396.3340

May 14, 2021

Richard Corey
Executive Officer
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Re: Revised Draft 2020 Mobile Source Strategy

Dear Mr. Corey,

Thank you for the opportunity to comment on CARB's Revised Draft 2020 Mobile Source Strategy (MSS), dated April 23, 2021. This comment letter is a follow-up to our previous letter dated October 20, 2020 on the draft MSS. Since the 2020 MSS will be the basis for the development of the State SIP Strategy for the 2022 AQMP, it is absolutely essential that all possible near-term and long-term concepts and strategies are included in the final MSS to help our region meet the ozone standards in 2023, 2031, and 2037.

South Coast AQMD staff appreciates that the revised draft MSS includes a new chapter on environmental justice to explore concepts and programs to reduce emissions in low-income and disadvantaged communities. We do recognize and fully support the need for more aggressive actions and measures to benefit the communities which have been disproportionately impacted by air pollution and economic disparities.

The revised draft MSS also includes a new chapter on near-term strategies and reductions in response to the requests from CARB Board members as well as many stakeholders including South Coast AQMD. However, we are disappointed that these near-term strategies still fall significantly short of the needed reductions for our region to meet the upcoming ozone standards, especially for the 2023 8-hour ozone standard attainment. We believe that the final MSS should maximize near-term emission reductions to the extent possible based on all available and feasible technologies and strategies.

1. 2023 Ozone Attainment Challenge

Compared to the draft MSS, the near-term measures in the revised draft MSS do not include any new concepts and strategies to achieve additional near-term reductions in 2023. In fact, the measures listed in Table 8 of Chapter 4 are mostly from the 2016 State SIP Strategy. These measures will only achieve a reduction of 6.6 tons per day (tpd) NO_x in 2023, far short of the 113 tpd of committed reductions from the State SIP measures. Furthermore, the 2023 reduction estimates for the two new MSS measures, namely the proposed Heavy Duty (HD) Vehicle Inspection and Maintenance (HD I/M) Program and Commercial Harbor Craft Regulation seem to be based on optimistic assumptions. For example, the main requirement for the inspection and testing in the proposed HD I/M will not take effect until January 1, 2024 in South Coast AQMD. As such, the 3.5 tpd of NO_x reductions that CARB projects for this measure in 2023 is uncertain and should not be relied upon without additional enforceable mechanisms. Please refer to our comment letter on the proposed HD I/M Program dated April 13, 2021 for more details. The 0.9 tpd of NO_x reductions in 2023 projected from the proposed Commercial Harbor Craft Regulation also appears to be high given that those reductions seem to be primarily from the use of renewable diesel fuel. Although renewable diesel is considered to provide some marginal NO_x benefits, the actual NO_x reductions would vary based on the specific applications and duty cycles. Therefore, this estimate requires further validation.

Assuming these measures are validated and can be fully implemented, additional near-term measures are still needed to further reduce emissions by 2023. CARB is responsible for adopting the guidelines requirements and/or criteria for many state incentive funding programs which are designed to achieve emission reductions beyond current regulatory programs through the replacement of older vehicles and equipment with cleaner technologies. Current state incentive funding programs are either underfunded or too restrictive preventing many fleets from transitioning to cleaner available technologies that could achieve significant near-term NO_x, GHG, and diesel PM emission reductions. Immediate action is needed to update the near-zero emissions guidelines requirements or criteria for many of the state incentive funding programs in order to enable more fleets to transition to cleaner available technologies by 2023.

Unfortunately, the 2020 revised draft MSS is still mainly focused on long-term attainment deadlines and GHG targets that would occur decades from now. With less than three years remaining from the 2023 ozone attainment deadline, our region is facing a daunting challenge to meet this standard, and all efforts must be focused on reducing NO_x today. As noted in our prior comment letter, CARB is required by law to adopt regulations and other measures that in conjunction with measures by the districts and the U.S. EPA will achieve the federal ambient air quality standards by the applicable dates per Health & Safety Code Section 39602.5(a). Failing to address the 2023 standard violates this mandate. This statute requires the adoption of measures to attain all applicable standards, so that CARB must adopt all feasible measures that can be implemented in the short term, not just concentrate on long-term measures. As discussed below,

all feasible measures should be implemented to require near-term reductions, including near-zero technologies. Similarly, SB 44 (Health and Safety Code Section 43024.2) specifically requires CARB to update the Mobile Source Strategy to include a comprehensive strategy for the deployment of medium-duty and heavy-duty vehicles in the state for the purpose of bringing the state into compliance with federal ambient air quality standards. Nothing in this bill allows the strategy to ignore the 2023 standard. Even if that standard is not attained on time, it still must be attained as expeditiously as practicable, so that near-term reductions that can be implemented after 2023 must be included in the MSS. Therefore, we strongly urge CARB to take decisive actions to strengthen the final MSS and the upcoming State SIP Strategy to maximize near-term reductions from all feasible measures.

2. Near-Zero Emission Trucks

The revised draft MSS identifies the proposed Advanced Clean Fleet (ACF) Regulation as one of the primary near-term measures with NO_x reductions of up to 10 tons per day in 2031. We have shared concerns with the proposed regulatory concept in a prior comment letter on April 2, 2021, and those concerns remain. Of importance here is that this proposed measure fails to achieve any reductions in 2023 as it is focused solely on the deployment of zero emission vehicles and technologies. We recognize that zero emission vehicles and technologies are the ultimate pathway to achieve our future air quality goals, and fully support their development and deployment. However, for heavy-duty applications, these technologies are simply not available for widespread deployment today. Instead, they are still under development or in pre-commercial demonstration phases, including for drayage trucks. Even if these technologies were available now, their large-scale deployment would be hindered by a lack of charging infrastructure, their significantly higher cost, and their inability to support the necessary duty cycles for many heavy-duty applications. In contrast, near-zero (NZE) emission trucks that meet CARB's lowest Optional Low NO_x standard have already been commercially available for several years and these trucks have proven to be viable to support the full range of drayage truck duty cycles. NZE trucks reduce at least 90% of NO_x emissions and eliminate 100% of toxic diesel emissions, providing much needed near-term reductions and public health benefits in the disadvantaged communities impacted by goods movement. NZE trucks also provide near term GHG reduction as the LCFS program has resulted in transportation CNG largely from renewable sources with many CNG fuel pathways having negative carbon intensities. The near term GHG and criteria pollutant benefits of near term NZE trucks are shown within the META Analysis Tool. Lastly, NZE trucks are also more affordable than zero emission trucks, providing easier access to small fleets and independent truck owners and operators with limited financial resources. Their relative affordability also maximizes the emission reductions that can be achieved through limited incentive funds. We have raised these points multiple times with CARB staff over the years to no avail. It is difficult to understand why CARB would avoid strategies that could get further NO_x, GHG and toxic diesel particulate matter emission reductions now and improve public health in disadvantaged communities immediately, especially given the pressing air quality and public health crisis we currently face.

An additional concern with CARB's exclusive focus on zero emission technologies is the upcoming deadline in the Truck and Bus Regulation to phase-out pre-2010 model year diesel trucks. There are approximately 7,000 pre-2010 diesel trucks operating at our ports which are facing the phase-out deadline of January 1, 2023. Without any financial assistance and/or regulatory incentives, these pre-2010 diesel trucks will be replaced by the most cost-effective option, which will be a 2014+ MY diesel truck. Although these trucks are newer, they are still diesel-fueled, and are almost as dirty and harmful as the trucks they would be replacing. Failing to address this unintended consequence means investment in another generation of diesel trucks continuing to impact local communities and hampering our ability to attain air quality standards. Please refer to our comment letter on the proposed ACF regulation dated April 2, 2021 for more details, including how the current proposed concept will likely have the unintended effect of extending the life of these older diesel trucks in drayage service.

Therefore, we urge CARB again to develop specific strategies and programs in the final MSS to maximize the near-term deployment of NZE trucks in our region thereby maximizing near-term reductions while providing substantial health benefits.

3. Incentive Funding for Technology Demonstration and Technology Deployment

Incentive funding will play a critical role, especially in the near-term, to accelerate the development and deployment of cleaner technologies. As mentioned in the revised draft MSS, the Governor's 2021 State Budget proposal includes "a \$1.5 billion comprehensive strategy to achieve the state's zero-emission vehicle goals." We are encouraged and delighted about the Governor's inclusion of \$1.5 billion in his budget proposal for zero emission vehicles and infrastructure development. This level of funding, however, will not be sufficient to support the development and deployment of zero emission vehicles and technologies to meet our air quality attainment goals. Based on the preliminary estimate provided in the discussion draft 2020 MSS, \$15 to \$29 billion in funding will be needed to achieve the technology trajectories over the next five years for on-road vehicles and several categories of off-road equipment (excluding ocean-going vessels, locomotives, and aircraft). This estimate is just for vehicles and does not include the cost of upgrading the state's electrical grid and distribution system to handle the regional and local loads needed to support these vehicles. According to the Energy Commission's recent AB2127 report, about 157,000 high power chargers (>50 kW) are needed statewide by 2030 to support on-road ZE vehicle projections in the MSS, and additional charging infrastructure will be needed for the off-road sector.

Given the need for significant levels of additional incentive funding for technology demonstration (in particular for off-road vehicles) and accelerated deployment of all vehicle types, we recommend again that the final 2020 MSS include a more refined estimate of associated costs

covering all source categories as well as a more specific spending and fund-raising plan to meet the necessary short-term and long-term emission reduction needs.

4. Federal Sources

Finally, as noted in our previous comment letter, at least 36% of NO_x emissions in the Basin are from federal sources. Attainment of the ozone standards is therefore dependent on achieving substantial reductions from these sources. We therefore reiterate our recommendation for CARB to identify all possible approaches to reduce emissions from federal sources, namely ocean-going vessels, locomotives, off-road equipment, and aircraft. These approaches could include, but are not limited to, maximum use of CARB's existing state authority over federal sources, seeking additional legislative authority, expanded state and local advocacy efforts, and seeking federal funding in areas where development of timely and stringent federal regulations is not expected.

Thank you again for the opportunity to comment on the revised draft 2020 MSS. We are fully committed and look forward to working closely with your staff in developing strategies that will yield the required reductions for attainment of the federal and state air quality standards in our region.

If you have any questions or would like to discuss these comments, please contact me at 909-396-3131, wnastri@aqmd.gov, or Dr. Sarah Rees, Deputy Executive Officer, Planning, Rule Development and Area Sources, at 909-396-2856, srees@aqmd.gov.

Sincerely,



Wayne Nastri
Executive Officer