



South Coast Air Quality Management District

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Comments on CARB's Proposed State SIP Strategy

South Coast AQMD staff appreciates the opportunity to comment on CARB's Proposed State Implementation Plan (SIP) Strategy. As you are aware, South Coast AQMD is heavily reliant on the emission reduction commitments in CARB's SIP Strategies as over 80% of our smog-forming NO_x emissions come from mobile sources. The Proposed SIP Strategy includes many specific strategies, however, one of the main features of this plan is the considerable uncertainty that remains in how to actually achieve the emission reductions needed to meet federal and state air quality standards. Our comments are therefore focused on two key areas of uncertainty regarding federal sources and zero emission infrastructure.

First, we fully agree with CARB's conclusion that the federal government must do significantly more to address mobile source emissions, especially for sources for which they have primary authority (such as ships, aircraft, and locomotives). By 2037, emissions from ships and aircraft alone are projected to total almost as much as the maximum amount of NO_x allowable in the atmosphere that still results in attaining the standard. These are sources that fall squarely within EPA's purview to regulate. Absent firm commitments by USEPA, CARB is forced to rely on 'black box' control measures¹ (i.e., control measures that rely on the future deployment of currently unknown technologies or strategies) to make up for the federal shortfall. South Coast AQMD is likewise forced to rely on CARB's use of 'black box' flexibility in our own Revised Draft 2022 Air Quality Management Plan (AQMP). For example, the Revised Draft 2022 AQMP includes 61 tons per day of 'black box' emission reductions, however only 10 tons per day of those emission reductions come from sources primarily under South Coast AQMD authority. The remaining amount comes from CARB's Proposed SIP Strategy. These 'black box' reductions make up nearly 50% of the total emission reductions needed to meet the federal ozone standard in 2037. This level of uncertainty is unfortunate but necessary given the lack of commitment from the federal government as well as the current state of technology in many mobile source sectors. We encourage CARB to continue to work with us to have USEPA and

¹ Clean Air Act Section 182(e)(5) allows extreme ozone nonattainment areas to rely on the future deployment of advanced technology for demonstrating attainment with the standard.

other relevant arms of the federal government take the actions necessary to meet federal obligations to achieve air quality standards in our region.

Second, we appreciate the analysis and discussion of zero emissions infrastructure deployment and emerging policies and funding in the Draft SIP Strategy. State policies are understandably heavily focused on zero emissions technology deployment for mobile sources. However, these technologies will require significant scaling to meet air quality standards on time, and we are currently not on a trajectory to meet that needed deployment at scale. For example, CARB has been strongly encouraging deployment of light-duty zero emission vehicles (ZEVs) for decades, however even with the highest deployment in the nation, light-duty ZEV's currently make up only about 3% of the vehicle stock statewide.² New CARB regulations are seeking to significantly scale that percentage higher, but a substantial amount of zero emission fueling/charging infrastructure will be needed to support that transition. We note that in South Coast AQMD, the need for medium and heavy-duty vehicle charging/fueling infrastructure is even greater given their contribution to NOx emissions. Determining how zero emissions charging/fueling infrastructure will be deployed at the scale and pace needed to meet air quality standards includes many uncertainties. As noted in the Proposed SIP Strategy, there are many unanswered questions that need significant action at the federal, state, and local level. This includes:

- developing funding frameworks that can be sustainable at scale,
- developing a significantly scaled up workforce (both those who install infrastructure, as well as developing cost-effective skillsets, training, programs, and private consultants available to fleet operators),
- establishing metrics and implementing programs to ensure zero emissions fueling/charging is reliable, including during anticipated increasing periods of extreme heat, wildfire and resulting grid downtimes,
- ensuring that land is available for ZE fueling/charging sites, in particular for the larger sites needed for medium and heavy-duty vehicles,
- developing policies that enable private industry to sustainably operate zero emissions vehicles AND develop and maintain the necessary infrastructure.

We are encouraged by the significant levels of funding have been made available through federal action such as the Infrastructure and Investments Jobs Act and the Inflation Reduction Act, as well as recent state budgets. This funding is unprecedented, and a good start to meeting the needs in our region. However, we know that even this level of funding is not sufficient to develop the amount of zero emissions infrastructure needed, and even if funding is allocated, it is not clear that this will be sufficient to ensure that infrastructure is made available.

An example illustrating the challenges associated with zero emissions infrastructure development is the May 2018 Public Utilities Commission (PUC) decision regarding medium and heavy-duty charging infrastructure. That decision approved \$765 million for investor owned utilities to

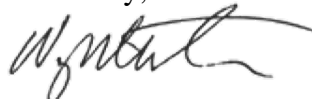
² <https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/light-duty-vehicle>

develop medium and heavy-duty charging infrastructure, and was supposed to support nearly 18,000 medium and heavy-duty ZEVs by 2024. \$365 million of this total was allocated to Southern California Edison (the largest electric utility in South Coast AQMD). However, as of the end of 2021 (over halfway into the program that ends in 2024), only 54 sites were operational statewide supporting 451 ZEVs. Only 19 of those sites were operational in SCE territory.³ This program is the single largest funding program to date for medium and heavy-duty vehicle infrastructure. However, the pace of development significantly lags behind the program's goals and is nowhere close to achieving the 80,000 chargers in 2030 and 250,000+ medium/heavy-duty vehicle chargers needed in 2037 that are described in the Proposed SIP Strategy. There are many policies being developed rapidly statewide to accelerate infrastructure development, however they will take time to develop and implement, and will also require considerable time for stakeholders to understand.

Because of the level of uncertainty briefly described above, we expect that there may be many gaps as we all attempt to rapidly transition to zero emissions technologies. We encourage CARB to be open to multiple solutions to fill in these gaps, rather than waiting for many years to decades for 'ideal' solutions to hopefully become reality. Similarly, we encourage CARB to dedicate more resources to addressing the zero emissions infrastructure challenge. A primary focus of CARB for many years has been on vehicle technology, however as most fleet operators and other stakeholders are discovering, the infrastructure is the most difficult piece to achieve. If CARB is going to be almost completely focused on zero emissions as the only pathway to achieve ambient air quality standards, it must provide more tools and support to make sure that zero emissions solutions can actually be achieved within the timelines set by federal law.

South Coast AQMD staff looks forward to continuing to work with CARB in addressing the many uncertainties that remain. Only through collective action and partnership towards shared policy goals can we provide clean air for our residents as quickly as possible. Don't hesitate to contact me to discuss these comments in greater detail.

Sincerely,



Wayne Natri
Executive Officer
South Coast AQMD

³ <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/sb-350-te/srp-ab-pilots-cadmus-ey2021-evalreport-presentation-aug-23-2022.pdf>