

September 3, 2021

Ms. Rajinder Sahota
Deputy Executive Officer, Climate Change & Research
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: 2022 Scoping Plan Update - Scenario Concepts Technical Workshop

Dear Ms. Sahota:

The San Joaquin Valley Air Pollution Control District (District) appreciates the opportunity to participate in the California Air Resources Board (CARB) public process regarding the 2022 Scoping Plan Update (Scoping Plan Update). Consistent with the District's adopted climate change policies, the District has long supported greenhouse gas reduction measures with priority for strategies that ensure the reduction of toxic and criteria pollutants to ensure near-term public health goals are met. This is particularly important given that the San Joaquin Valley is home to 23 out of 30 of the state's most disadvantaged communities disproportionately impacted by socio-economic and environmental factors.

Through strong collaboration with state agencies and residents, businesses, public agencies, community-based organizations, and other stakeholders, the San Joaquin Valley has served as a center of innovation for many of the state's recent transformative clean air, low carbon strategies, with notable examples including:

- Next generation of clean electric and plug-in hybrid passenger vehicles throughout the San Joaquin Valley, with a focus on low-income, disadvantaged communities
- Next generation of zero and near-zero emissions heavy duty truck and bus technologies in a wide variety of applications
- Next generation of low-carbon sustainable agricultural and organic material management practices, including livestock/landfill methane capture, conservation management practices, alternatives to open burning (soil incorporation/whole orchard recycling), irrigation pump electrification and energy efficiency measures, and dairy electrification

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- Next generation of freight and off-road equipment including fleet transition to the latest tier agricultural equipment, electric yard-trucks, electric forklifts, and electric agricultural utility terrain vehicles
- Next generation of zero-emissions residential and commercial landscaping equipment
- Promotion of enhanced forest management practices to address increasingly devastating wildfires
- Extensive deployment of energy efficiency measures across manufacturing, food processing, and other sectors
- Extensive deployment of solar and other renewable energy generation
- Affordable housing and sustainable community efforts to improve walkability, access to transit, and reduce vehicle miles traveled
- New innovative community-driven low carbon clean air measures such as electric vehicle car sharing programs, urban greening, and vegetative barriers

As the District and CARB move forward in our collective clean air journey, we support CARB's ongoing work under the Scoping Plan Update to identify transformative measures that will assist the Valley in meeting our air quality and public health goals, while also continuing progress in achieving the state's greenhouse gas reduction and carbon neutrality goals. With this in mind, the District offers the following initial comments.

Need for Near-Term Emissions Reductions to Protect Public Health

The San Joaquin Valley faces one of the most significant air quality challenges in the country due to its unique meteorology, topography, and geography, and is currently in nonattainment of the latest federal ozone and PM_{2.5} standards. Near-term criteria pollutant emission reduction strategies are critical to achieve federal health-based standards within the timeframes called for by the San Joaquin Valley's clean air attainment plans (developed jointly with CARB).

The presence of two major transportation corridors connecting Northern and Southern California contribute significantly to the Valley's air quality and public health challenges. Air quality analysis shows that over 85% of emissions of oxides of nitrogen (NO_x), the major precursor for both ozone and PM_{2.5} formation in the Valley, comes from mobile sources. As such, emissions reductions from mobile sources are considered critical to attain the federal air quality standards and associated benefits to public health.

Building on past air quality improvement efforts, the District, in partnership with CARB, recently adopted the *2018 Plan for the 1997, 2006, and 2012 PM_{2.5} Standards (2018 PM_{2.5} Plan)* that outlines the actions necessary for further

improving the Valley's air quality and meeting the federal air quality standards for PM_{2.5} by the applicable deadlines of 2024 and 2025.

As a critical issue for the San Joaquin Valley, heavy-duty trucks are the largest source of Valley NO_x emissions, and attaining the health-based ozone and particulate standards will require significant additional reductions in truck emissions through the development and deployment of advanced truck technology. Additionally, given the significant toxic impacts in the San Joaquin Valley from freight-related diesel particulate matter, reducing emissions from heavy-duty trucks will provide significant health benefits for communities in the Valley and throughout the state, particularly disadvantaged communities located near major freight corridors.

Given the severity of the Valley's air quality challenges and the need for ongoing emission reductions, CARB and the District have worked together to adopt the most stringent mobile and stationary source emissions control strategy in the nation. Planning for attainment of the latest federal 8-hour ozone standards will necessitate even further control of NO_x emissions from mobile sources. As a part of recent attainment planning efforts for the federal PM_{2.5} standards, the State committed to reduce an aggregate 32 tons per day (tpd) of NO_x and 1 tpd of PM_{2.5} by 2024/2025 in the Valley. These commitments were included in the *San Joaquin Valley Supplement to the 2016 State Strategy for the State Implementation Plan (2018 Supplement)*, adopted by CARB on October 25, 2018, and were approved by U.S. EPA into the State Implementation Plan on June 30, 2020.

The District understands that the Governor's recent Executive Order N-79-20 regarding zero emission vehicles is a primary driver in CARB's Scoping Plan evaluation. As strategies are considered in support of the Executive Order, it is critically important that the need for near-term emissions reductions to meet air quality public health goals be recognized and prioritized. As zero emission technology is still being developed for many types of vehicles and duty cycles, the promotion of currently available near-zero emission technologies, such as 0.02 g NO_x/hp-hr near-zero heavy duty engine technologies (90% reduction from current regulation) fueled by low-carbon renewable natural gas, could still play a critical role in achieving the needed emissions reductions to meet California's near-term air quality and climate goals, while continuing to also transition to zero-emissions technologies.

In developing the Scoping Plan, the District recommends that CARB consider additional measures for achieving the near-term fleet turnover and emissions reductions required to meet the air quality and public health goals of the San Joaquin Valley. Given currently available and rapidly developing zero and near-

zero heavy-duty truck technologies, the District urges CARB to consider measures that provide for additional regulatory and incentive-based opportunities for accelerating fleet turnover in a manner that is most broadly and expeditiously achievable by fleets that operate in the San Joaquin Valley and California. Additional consideration should also be provided for ensuring that Valley communities are provided equitable benefits with respect to air quality and investment benefits under various strategies included in the Scoping Plan.

Woody Biomass and Solid Biomass Waste

With the recent adoption of enhancements to the District's agricultural burning strategy, the Valley is now working towards completing a near-complete phase out of open burning by 2025. Successfully completing this transition away from open burning in the face of increasingly difficult conditions in the agricultural sector (e.g. extreme drought, Sustainable Groundwater Management Act, loss of biomass power) will require an "all in" approach to identify additional alternatives to address large amounts of agricultural waste material in the coming years. Additionally, in light of other related efforts, a comprehensive approach to handling the volume of waste generated through the phase-out of open burning, wildfire mitigation efforts, and landfill diversion mandates is needed. To address agricultural woody wastes, potential paths include chipping and grinding for soil incorporation, emerging bioenergy practices (e.g. pyrolysis and cellulosic ethanol plants), composting, and other feasible emerging technologies, with priority for the beneficial reuse of materials and cleanest technologies available.

In support of the Valley's phase-out strategy for agricultural open burning, in 2018, the District created the Alternatives to Agricultural Open Burning Incentive Program. This incentive program provides financial incentives to commercial agricultural operations located within the Valley to chip agricultural material. The chipped material is then used for soil incorporation or land application on agricultural land as an alternative to the open burning of the agricultural materials. The District has allocated \$40.6 million in locally generated funding to this program providing for significant air quality and carbon sequestration benefits. As an important recent development, just this week, the District launched an expanded program in partnership with CARB utilizing \$180 million of new state funding directly allocated in support of this transition.

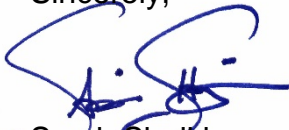
Additionally, CARB has committed to partner and coordinate with the District on several measures to help increase the availability of alternatives to open burning and assist the agricultural industry comply with the new phase-out mandates. One such measure is the establishment of a Clean Bioenergy Collaborative by CARB, the District, and other state agencies, with the goal of

providing a forum for key stakeholder groups to identify and overcome issues inhibiting deployment of advanced bioenergy projects, and to communicate resulting options and benefits.

CARB's Scoping Plan Update public workshop included options to either exclude biomass derived fuels or include biomass derived fuels from forests, agriculture, and municipal solid waste streams. Consistent with the goals of the Clean Bioenergy Collaborative, the District supports scenarios that include exploring new alternatives in support of the open burning phase-out strategy, including the beneficial reuse of waste or clean bioenergy technologies as viable alternatives to reduce open burning emissions and achieve carbon neutrality.

The District is committed to continuing to work collaboratively with CARB staff through the Scoping Plan update process. Thank you again for the opportunity to review and comments on this process. Please do not hesitate Tom Jordan, Senior Policy Advisor, at 559-230-6000 should you have any questions or would like any clarification.

Sincerely,



Samir Sheikh
Executive Director/Air Pollution Control Officer