



November 25th, 2019

The Honorable Board Members
California Air Resources Board
1001 I Street
Sacramento, CA 95814

[via electronic submittal to www.arb.ca.gov/lispub/comm/bclist.php]

RE: Advanced Clean Truck Draft Standard

Honorable Board Members,

The Central Valley Air Quality (CVAQ) Coalition and partners write in response to the Advanced Clean Truck (ACT) Rule draft standard that was posted on October 22, 2019. Truck emissions contribute significantly to the formation of both ozone and fine particle pollution (PM) in the San Joaquin Valley, as well as to diesel PM and NOx pollution in environmental justice communities. With the ACT Rule, significant ozone, diesel and PM2.5 reductions can be achieved to reduce the severe exposure Valley residents currently endure. However, the most impactful reductions can only be achieved if the ACT Rule is strengthened beyond what the California Air Resources Board (CARB) has committed to in the draft standard. To protect public health, support environmental justice, and meet federal air quality standards for PM2.5, CARB should strengthen the rule so that at least 15% of medium- and heavy duty-trucks on the road are zero-emission by 2030.

I. Protection of Public Health

The San Joaquin Valley is arguably the most polluted air basin in the nation. The 2019 State of the Air report designated the Valley metropolitan areas of Fresno, Madera, Hanford, and Bakersfield as the most polluted cities for both year-round and short-term particle pollution.¹ These Valley cities consistently rank among the top five most polluted cities for ozone as well. Particles of PM_{2.5} are so small they can bypass the body's normal defenses and move directly into the bloodstream, contributing to asthma attacks, heart attacks, heart and vascular disease, and can even incite genetic changes that can be passed down through generations.²³⁴⁵

PM_{2.5} affects everyone in our air basin, with a more severe impact on sensitive populations. Those most at risk are individuals with heart and lung diseases, pregnant women, children under the age of eighteen, and adults sixty-five and older. Approximately 40-50% percent of the Valley's population fall under this 'sensitive population' category, the majority being children.⁶ As a result, children in the Valley are twice as likely to be diagnosed with asthma before the age of 18 compared to the national average.⁷ Children with asthma in Bakersfield, Fresno, and Modesto make an extra 1,596 hospital visits a year as a result of elevated fine particulate matter (PM 2.5). Elevated PM_{2.5} is also associated with increased emergency visits for children with pneumonia, and adults with asthma and cardiovascular problems.⁸

The ACT Rule has the capacity to provide relief, but only if CARB creates a more ambitious proposal than the one currently put forward. CARB's Standardized Regulatory Impact Assessment found that while the proposed rule avoids 587 premature deaths, a stronger alternative would avoid more than 920 premature deaths. The more stringent alternative achieves an *additional* \$3.14 billion in public health savings, even while achieving \$4.5 billion in cost savings for California businesses. Still, CARB staff opted to reject the alternative in favor of a less cost-effective rule which saves fewer lives and allows for more hospitalizations and emergency room visits.

¹ American Lung Association, *State of the Air*, 2019 www.lung.org/our-initiatives/healthy-air/sota/city-rankings/

² American Lung Association, www.lung.org/our-initiatives/healthy-air/outdoor/air-pollution/particlepollution.html#cando

³ American Heart Association, <https://www.ahajournals.org/doi/full/10.1161/CIR.0b013e3181dbee1>

⁴ California State University, Fresno <http://www.csufresno.edu/chhs/cvhpi/documents/aqr-web.pdf>

⁵ Journal of Allergy and Clinical Immunology, [https://www.jacionline.org/article/S0091-6749\(10\)01193-0/abstract](https://www.jacionline.org/article/S0091-6749(10)01193-0/abstract)

⁶ American Lung Association, *State of the Air, Groups Most at Risk*, 2019 <https://www.lung.org/our-initiatives/healthy-air/sota/city-rankings/msas/fresno-madera-hanford-ca.html#pmann>

⁷ Joint Center for Political and Economic Studies at Fresno State, *Report on Health Inequalities in the San Joaquin*, 2012 <http://www.fresnostate.edu/chhs/cvhpi/documents/cvhpi-jointcenter-sanjoaquin.pdf>

⁸ California State University, Fresno <http://www.csufresno.edu/chhs/cvhpi/documents/aqr-web.pdf>

II. Environmental Justice

While roughly half of the population throughout the San Joaquin Valley falls under the “sensitive population” category, there are communities that face exposure burdens of unequal distribution. Many communities, particularly those of low income and of color, are located closer to pollution sources, including major roadways and sites that attract cars and trucks. A prime example of this uneven distribution comes from South Fresno where various distribution centers and diesel truck routes are located near schools, parks, and neighborhoods. Another example comes from the Port of Stockton where nearby residents experience dramatically higher diesel truck activity compared to other areas in the city.

On top of proximity to environmental burdens, environmental justice (EJ) communities face additional barriers that put them at higher risk. Barriers include the lack of central air conditioning that would allow for pollution filtration, the prohibitive cost of air filters and filtration devices, and limited access to public health information due to language barriers. Additionally, higher exposure burdens communities with the costs of treating the associated impacts. Typical ER visits cost an average of about \$1,500, and hospitalizations can cost ten times that in many cases. Without insurance, Pulmicort, a steroid inhaler, can generally retail for over \$175 and Albuterol, one of the oldest asthma medicines, typically costs \$50 to \$100 per inhaler in the United States.⁹ Furthermore, many community members experience prolonged exposure due to the outdoor work they perform, including agricultural workers, construction workers, and landscapers, all of whom have no other option but to work through the days of high ozone and particle pollution. More ambitious measures in the ACT Rule are necessary to establish a safer environment for our EJ communities.

III. Attainment of PM2.5 Standards

In CARB’s Mobile Source Strategy, the agency acknowledged that the magnitude of emissions reductions needed from medium- and heavy-duty vehicles won’t be met by current policies. The Mobile Source Strategy further stressed that bringing the cleanest technologies to market as quickly as possible is essential for achieving near-term criteria pollutant reductions that can help make up the deficit. Strengthening the proposed ACT rule offers a critical opportunity to achieve earlier action.

The proposed rule, which would take effect in 2024, requires large manufacturers (greater than 500 annual truck sales) to sell zero-emission medium- and heavy-duty vehicles as a percentage of their total sales. In addition to sending a market signal to manufacturers and fleets, the

⁹ Health Cost Institute. *2012 Health Care Costs and Utilization Report*.
<https://healthcostinstitute.org/research/annual-reports/entry/2012-health-care-cost-and-utilization-report>

proposed rule includes a crediting mechanism whereby manufacturers can begin generating ZEV credits for zero-emission trucks sold beginning in 2021, and bank them toward future compliance. The apparent policy objective of the crediting mechanism is to incentivize earlier action, and this allows the rule to influence the market before the 2023 attainment deadline. Unfortunately, the sales targets in the current proposed rule are far too low to incentivize early action. We are not aware of any analysis that suggests the proposed targets will put us on a path to meet national air quality standards. In fact, the targets are so low that much of the manufacturers' obligations could be met simply by buying credits from smaller manufacturers who are exempt from the rule, thereby allowing larger manufacturers to defer plans to ramp up early production and delaying mass deployment even further. If this rule is to accelerate early deployment, stronger 2024 sales targets are needed.

The good news is that a far higher sales target is possible. Trucks in the San Joaquin Valley are ripe for electrification. They have frequent stops and shorter routes, with average truck trip of 65 miles.¹⁰ Publicly confirmed single orders for zero-emission trucks today are 9% higher than the sales that would result from this rule 4 years from now. We urge CARB to direct Staff to revise the rule so that it begins with higher sales targets and achieves zero-emission vehicles for at least 15% of the total truck population by 2030. We believe this sales target is the minimum consistent with deployment levels necessary to meet the magnitude of our air quality crisis, to avoid being outpaced by growth in the total truck population, and to spur earlier participation from large manufacturers.

Numerous burdens are brought upon the people of the San Joaquin Valley due to the pollution associated with truck. The ACT Rule has tremendous potential to provide much-needed relief for Valley residents, especially the half of whom fall in the 'sensitive population' category and everyone in our environmental justice communities. CARB has made various commitments to clean the air and the people in the Valley need clean air now; we expect CARB to provide ambitious regulation through the ACT Rule. CVAQ and partners urge CARB to take action now and adopt an adequately strong standard that aligns with market growth and upholds the right to breathe clean air.

Sincerely,

Genevieve Gale

Central Valley Air Quality Coalition

¹⁰ Resource Systems Group, *San Joaquin Valley Model Improvement Program Freight Forecasting Models*, p. 17 <https://rsginc.com/files/publications/SJV%20freight%20forecasting%20models%20documenation.pdf>

Kevin Hamilton
Central California Asthma Coalition

Nayamin Martinez,
Central California Environmental Justice Network

Shayda Azamian,
Leadership Counsel for Justice and Accountability

John Shears
The Center for Energy Efficiency and Renewable Technologies

Yolanda Park,
Cafe Coup - EJ 58

Thomas Helme,
Valley Improvement Projects

Samuel Molina,
Mi Familia Vota

Caroline Farrell,
Center on Race, Poverty and the Environment

Tom Frantz,
Association of Irrigated Residents (AIR)