



October 16, 2020

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 California Air Resources Board  
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Submitted via email: [cleancars@arb.ca.gov](mailto:cleancars@arb.ca.gov)

**Subject: Public Health Comments on Advanced Clean Cars II Workshop**

Dear Mr. Cunningham:

On behalf of the undersigned organizations, we are writing in response to the California Air Resources Board's (CARB) September 16, 2020 Advanced Clean Cars II (ACC II) workshop. The launch of the next round of clean vehicle standards marks an important milestone on the pathway to achieving healthy air and a healthy climate. With Governor Newsom's Executive Order N-79-20 to achieve 100 percent zero emission vehicle sales by 2035, it is essential that these standards encompass the needed stringency and clarity to achieve these goals and provide a model for other states to follow. As California moves toward a fully electric transportation sector, we appreciate

that CARB staff have maintained a strong focus on ensuring real-world pollution reduction benefits as internal combustion vehicles decline.

Largely driven by the transportation sector, California's air pollution and climate challenges affect health today. The impacts of transportation pollution, poor air quality and climate health impacts fall disproportionately on our most vulnerable communities, including lower-income communities and communities of color. The American Lung Association's 2020 *State of the Air* report found that 98 percent of Californians live in counties affected by unhealthy air, and that seven of the ten most ozone-polluted cities in the United States are in California. Air pollution contributes to a wide range of health impacts including asthma attacks, heart attacks and strokes, lung cancer and premature death: these burdens fall hardest on children, seniors, people with heart and lung disease and our most disadvantaged communities. Climate change amplifies many existing public health and equity challenges, including extreme heat, drought and wildfires that add to our pollution burdens. The ACC II standards and complementary investment strategies must ensure all California communities benefit from real-world emissions reductions and access to zero emission technologies.

Because the workshop was heavily focused on the criteria emissions program, we offer more extensive comments on those elements below, with more substantial notes on the Greenhouse Gas emissions and Zero Emissions Vehicle programs reserved for future workshop comments.

#### **Comments on the Criteria Emissions Program**

As California moves forward toward an all-electric passenger vehicle fleet in the coming decades, the workshop was heavily – and appropriately – focused on reducing the harmful emissions generated by the combustion fleet. While we strongly support the transition to zero emission technologies as rapidly as is possible, we know that we must also strengthen controls on the combustion fleet and ensure real-world benefits of those stronger standards.

***We strongly urge CARB staff to put an end to program design elements that lead to more on-road emissions and health impacts in California communities.*** The goal of the ACC II criteria emissions program must be to tighten standards and secure real-world clean air and health benefits. Specifically:

- **We encourage CARB to remove zero emission vehicles from the fleet average standards** for criteria pollutants (and greenhouse gas emission standards, though not covered in this workshop). The current inclusion of ZEVs in the fleet average approach allows for non-ZEVs to be certified to higher emission levels to balance out zero emission vehicles, raising concerns around disparities in pollution burdens in communities with lower ZEV penetration rates. All combustion vehicles must be held to tighter standards that drive innovation rather than allowing higher emitting vehicles to counteract the benefits of zero emissions. We are especially concerned that the higher emitting combustion vehicle classes may be concentrated in lower-income communities
- **We support CARB tightening the standard for ozone-forming tailpipe emissions of oxides of nitrogen (NOx) and non-methane organic gases (NMOG) from 0.03 to 0.015 grams/mile and eliminating higher-polluting vehicle certification categories.** These actions will ensure continued progress in reducing ozone-forming pollutants and ensure that automakers shift production away from higher-polluting vehicle options.
- **We support ending emissions certification testing flexibilities that allow excess emissions.** At present, the composite emissions testing certification allows manufacturers

to meet a weighted average composite test while far exceeding the individual test limits. CARB should eliminate the weighted average composite option that likely increases pollution burdens.

- **We urge CARB to tighten the evaporative emissions standard to reflect real-world performance.** At present, the evaporative emissions of ozone-forming reactive organic gases from passenger vehicles exceed the tailpipe emissions. Despite the standard for “running losses” during vehicle operation being set to 0.05 grams per mile, nearly 90 percent of vehicles perform at or below 0.010 grams per mile.
- **We support CARB in ensuring heavier passenger vehicle emissions are controlled in real-world driving conditions.** We appreciate that CARB intends to explore necessary changes in certification and operational impacts of heavier vehicles included in the rule.
- **We support strengthening particle pollution standards, testing and real-world performance standards.** Because of the well-documented carcinogenic, cardiovascular and respiratory health impacts of fine particle pollution, public health advocates were vocal in support of the establishment of the 1 mg/mile particle pollution standard included in the 2012 Advanced Clean Cars standards. We believe that the next round of California standards should build on that strong standard and address the impacts of real-world driving conditions and other factors that are interfering with attainment of those health-protective levels. We encourage CARB to take the following steps:
  - **Set a stronger particle standard on the US06 test cycle** to ensure more vehicles achieve the 3 mg/mile standard on the way to the 1mg level by 2027.
  - **Tighten cold start, idling, engine soak testing requirements** to address emissions at vehicle start up.
  - **Address high-power cold start emissions from Plug-In Hybrid Vehicles (PHEVs).** High-power cold starts (e.g. gas engines kick in on freeway on-ramps under high power demand) can create high emission events, especially in the heavier vehicle classes where these emissions can be far in excess of the certified vehicle levels. These impacts must be addressed to ensure stronger controls for rolling cold starts.
- **We encourage CARB to extend useful life durability requirements for emissions controls on light duty vehicles.** While not presented during the workshop for combustion vehicles, ensuring emissions controls function over the full useful life is an important consideration for this rulemaking. As discussed during the workshop, CARB staff are proposing to establish durability requirements for electric vehicles – this should be paired with an evaluation of extending the useful life provisions for combustion vehicles.

### **Comments on Zero Emission Vehicle Program**

While not addressed in depth in the September workshop, the California Zero Emission Vehicle (ZEV) standard is critical to achieving health-protective National Ambient Air Quality Standards and California climate standards. The American Lung Association’s “Road to Clean Air” report was released in September, noting that a widescale transition to electric transportation in the coming decades could yield over \$22 billion in annual public health benefits in California. We know that transportation emissions burdens fall heavily on our most disadvantaged communities, and the ZEV program must be viewed as an opportunity to support clean air health benefits for those communities with high pollution burdens.

- **We support Governor Newsom’s call for CARB to establish the next round of Zero Emission Vehicle standards to achieve 100 percent ZEV sales in California by 2035.** These ZEV standards set by CARB must be clear in terms of the 100 percent target, avoid crediting

that slows progress to 100 percent sales, and provide a model for other states to adopt and get on the pathway to implement California's standards as authorized by the Clean Air Act. We believe CARB must move aggressively on the passenger vehicle standards within the broader movement to transportation electrification to achieve clean air and climate standards, including the Advanced Clean Trucks rule, the Fleet Rule, incentive and infrastructure programs.

- ***Increase access to zero emission technologies and health benefits in disadvantaged communities.*** Transportation pollution burdens fall most heavily on disadvantaged communities. We call on CARB to ensure that vehicle standards support the expansion of zero emission mobility options and clean air benefits in our most disadvantaged communities. Within the broader ZEV policy infrastructure, CARB should ensure that infrastructure investments and pilot projects, electric mobility options, consumer incentives and other strategies correct the disparities in pollution burdens and negative health outcomes.
- ***We appreciate CARB exploring options for supporting consumers in making ZEV purchase decisions.*** The workshop provided important information about consumer protections in the ZEV market, warranty and service information and other consumer-facing information about vehicle performance and health. We look forward to working with staff on these elements of the proposal.

#### **Comments on Greenhouse Gas Emissions Program**

The public health community has long supported the California Air Resources Board's efforts to reduce greenhouse gas emissions from the passenger vehicle fleet. We also strongly support California's authority under the Clean Air Act to adopt and implement more stringent standards than those developed by the federal government. We are deeply opposed to the rollbacks of both this authority and of the more health-protective standards that were developed in conjunction with the federal government and automakers in 2012.

- ***We encourage CARB to set the most stringent possible vehicle greenhouse gas emission controls under the ACC II.*** We look forward to working with the board on this element of the rule in the coming months.
- ***We support prohibiting high-GWP refrigerants in vehicle air conditioning systems*** rather than developing more complicated crediting systems that may provide weaker signals for phasing out more harmful chemicals.

As the California Air Resources Board continues to move forward with the development of the next round of vehicle emission standards, we look forward to working with the board and staff to continue the critical work of protecting public health against harmful air pollution and climate change.

Thank you,

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