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The Honorable Mary Nichols
Chair, California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: FUNDING PLAN CERTAINTY FOR IMMEDIATE, COST-EFFECTIVE GHG EMISSION REDUCTIONS

Dear Chair Nichols:

The **53** undersigned organizations, leaders in the effort to clean California's air and meet greenhouse gas emission reduction goals, and in the spirt of collaboration, urge the California Air Resources Board (CARB) to expressly allocate incentive funds in the *Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)* for heavy-duty low NOx vehicles using renewable fuel.

THE PROBLEM

Diesel trucks are the single largest source of air pollution in California's two most polluted air districts: South Coast and San Joaquin Valley. In fact, diesel trucks cause nearly half of all the pollution in the heavily impacted San Joaquin Valley. Governor Newsom has called for eliminating diesel trucks by 2030 because they are a major source of air pollution as well as black carbon emissions, which is one of the most damaging climate pollutants.

Low NOx heavy-duty vehicles remain one of the most cost-effective immediate remedies to the problems of greenhouse gas emissions (GHG) and NOx, and are certified by the California Air Resources Board as 90 percent cleaner than diesel. When running on low carbon renewable fuels, lifecycle greenhouse gas emissions are reduced substantially when compared to diesel, including "carbon negative" for some feedstocks.

Removal of incentive funding will significantly and immediately slow the continued deployment of heavy-duty low NOx vehicles. Continued incentive funding especially in the near-term will increase the rate of deployment, bring low NOx technology closer to true commercialization, and has provided an effective, balanced, efficient and streamlined approach where technologies can compete and deliver clean air emissions.

THE REQUEST

Provide funding to the *Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP*) in the *California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology* Program for vehicles which meet a 0.02 g/bhp-hr NOx standard or better, especially the 8.9L and 11.9L engines. An expressed allocation to *HVIP* of at least 20% - a percentage consistent with previous allocations – for refuse and heavy-duty trucks would leave a substantial 80% for investments in other technologies. All clean technologies would be a winner, at least until there is a commercially available zero-emission heavy-duty vehicle in each of these vehicle classes.

We recognize and understand *GGRF* revenues are decreasing while spending needs remain acute. However, please consider:

- GHG and NOx Emissions Continue to Increase in the HD Sector– the immediate remedy is low NOx trucks fueled with renewable natural gas or renewable propane: With the transportation sector the largest emitter of greenhouse gas emissions, funding low NOx technology in the 2020-2021 fiscal year will dramatically reduce GHG emissions and air pollution right now, while creating in-state jobs and boosting economic development throughout California.

- Non-Attainment Deadlines: To reach federally-mandated ozone attainment goals by 2023, and even more ambitious federal ozone targets by 2031, California must utilize its broad, performance-based air-quality strategy. The state's *Mobile Source Strategy* estimates a reduction from mobile sources of 80 percent in smog-forming NOX emissions and 45 percent in GHG emissions in the South Coast AQMD alone, and a 50 percent reduction in the consumption of petroleum-based fuels statewide. It calls for the deployment of 900,000 low NOx vehicles by 2031 to achieve these goals.

- Where are the Heavy-Duty ZEVs?: CARB has expressly acknowledged that the largest classes of zero-emission heavy-duty vehicles may not be available for quite some time. California cannot allow diesel to be the fuel of choice through the next set of attainment deadlines. A recent study by the International Council on Clean Transportation (ICCT) confirmed that the cleanest diesel vehicles are five times more polluting than the federal and state 2010 certification limits for NOx at low speeds. The study also revealed that average NOx emissions for line-haul trucks are more than seven times the engine certification limit in urban driving. These line-haul trucks only emit NOx at engine certification limit levels when traveling at high speeds (over 50 mph), which is only 50% of their total time in operation

- Opportunity Cost: allocating all funds in *HVIP* to zero emission technologies would have a real impact on the immediate needs to reduce significant air pollution for our most troubled air sheds throughout the state. ZEV technology should be part of the solution, but near-term NOx reductions from the largest vehicles in the state are only achievable with a portfolio approach.

- HD Diesel is still the cheaper technology: low NOx vehicles have a proven track-record as a critical, cost-effective, emissions reduction strategy and still need additional support from *HVIP* because the technology adoption is voluntary and support is needed to motivate fleet interest.

- Existing Investments: If low NOx vehicles become ineligible for *HVIP* funding, an effective and seamless alternative program is vital to protect existing business investment, market certainty, innovation, and truck owner considerations. In addition, low NOx engine manufacturer planning will certainly all be jeopardized without a consistent and continuous signal from the State that near-term air quality reduction achieved through their technology is valued. Such a funding stream would be in the public's interest in achieving and maintaining stable clean energy policies based on consistent investment planning and private capital.

- Regulatory Signals are Important: Given the inherent advantages to just purchasing another diesel truck, it is critical to send consistent purchasing signals to the sector. The long-term acceptance of a technology is necessary to ensure full commercialization. Such a dynamic will most likely result in a near-term void in the cleanest purchases possible in the heavy-duty sector because zero-emission heavy-duty technologies are not yet ready for immediate deployment, and diesel has the historical advantage.

- Benefits of *HVIP*: unlike other state programs right now, *HVIP* does not have a cyclical application process and extended evaluation award period that could take up to 18 months, and contracting

processes do not substantially delay new opportunities to deploy low NOx equipment. Repowering with the latest low NOx engine would be essentially eliminated if *HVIP* no longer funds low NOx vehicles. And the voucher nature of *HVIP* allows reaction to the immediate decision process associated with repowering versus repairing. Absent *HVIP* funding, fleets will pursue a strategy of repair, delay or status quo. Such clear limitations to incentive funding will mute demand from the diesel truck fleet and maintain the status quo.

THE PROBLEMS WITH NOT FUNDING LOW NOx TECHNOLOGY

Our state suffers from the worst air quality in the nation and federal ozone deadlines are looming for the South Coast Air Quality Management District (SCAQMD), the San Joaquin Air Pollution Control District (SJAPCD), and at least seven other California air basins identified by the American Lung Association as ranking in the top 10 worst air sheds in the nation for tropospheric ozone. These local air districts must reduce regional NOx emissions by up to forty-five percent by January 1, 2023 or face federal regulatory and financial consequences in addition to the true public health impacts of poor air quality which easily could reach into the billions of dollars.

Further, both extreme non-attainment regions have identified medium- and heavy-duty diesel trucks as the leading source of regional NOx pollution even though these vehicles make up less than two percent of the vehicle population on California's roads today. Heavy-duty diesel trucks are also largely responsible for added air toxic emissions as demonstrated by the SCAQMD's Multiple Air Toxics Exposure Studies V (MATES) and represent roughly 20 percent of all carbon emissions attributed to mobile sources.

Additional incentive dollars in the near term will increase the rate of deployment, bring low NOx technology closer to true commercialization, and deliver an immediate improvement to local air quality and climate change. Although low NOx technologies are available today to achieve NOx and toxic emissions goals, removal of *HVIP* incentives will slow the full commercialization of this technology.

Sincerely,

Joy Alafia, President and CEO, Western Propane Gas Association
Mark Bragg, Chief Executive Officer, U.S. Biogas, Inc.
Doug Button, President, South San Francisco Scavenger Company, Inc.
Bernie Camara, General Manager, Livermore Sanitation Inc.
Todd Campbell, Vice President of Public Policy, Clean Energy
Tim Carmichael, State Agency Relations Manager, Southern California Gas Company
Evan W.R. Edgar, Regulatory Affairs Engineer, California Compost Coalition
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Patrick Smith, Transportation Manager, Harris Ranch
Ray Scott, Price Disposal
Tom Swenson, P.E., Business Development Manager, Cummins Inc. – Natural Gas Group
Frederick Tornatore, Chief Technical Officer, TSS Consultants
Mike Zimmerman, General Manager, Momentum Fuel Technologies

cc: Board Members, California Air Resources Board