

Clerk of the Board California Air Resources Board 1001 I Street Sacramento, CA 95814 December 7, 2020

RE: Removal of All 0.02g NOx Engines from HVIP in Proposed Fiscal Year 2020-2021 Funding Plan for Clean Transportation Incentives

Staff is recommending to the California Air Resources Board ("Board" or "CARB") to "Graduate Internal Combustion Engines" from HVIP, which effectively means the removal of the 11.9-liter natural gas engine, in addition to the lower displacement natural gas and propane engines removed last year, certified to the optional 0.02 g/bhp-hr NOx standard. This coalition believes this is inappropriate because:

- 1. It will increase purchases of traditionally fueled (diesel) and higher emission engines because they are less expensive than a 0.02 g/bhp-hr engine and a legal purchase choice.
- 2. It sends a strong message to fleets to continue to purchase traditionally fueled vehicles, which will be on the roads for at least two decades.
- 3. There is no functional "landing spot" for 0.02 g/bhp-hr technologies, which the Board committed to providing in last year's funding plan adoption.
- 4. Removing 0.02 g/bhp-hr technologies is a disincentive for the continued development and deployment of in-state renewable natural gas (RNG).
- 5. Based on recent Low Carbon Fuel Standard data, the current average carbon intensity for ALL transportation natural gas fell BELOW ZERO at -0.85 gCO2e/MJ in 2Q 2020; staff's proposal eliminates incentives for this critical climate benefit.
- 6. Removing 0.02 g/bhp-hr technologies would eliminate one of the HVIP program's most cost-effective emission reduction strategies at a time that the state can ill-afford to spend excessively on environmental and economic development benefits,

Staff is also recommending that technologies meeting the 0.01 g/bhp-hr optional NOx standard and paired with in-state renewable natural gas contained in the Omnibus Regulation be included in the near-zero definition revised in the FY 2019-20 Funding Plan. This is inappropriate because:

- 1. Meeting the proposed optional 0.01 g/bhp-hr NOx standard will require meeting the other provisions of the Omnibus Regulation including, but not limited to, new test cycles, new system aging procedures and test protocols; as such, considering adoption of this standard in isolation is improper.
- 2. Incorporating an optional 0.01 g/bhp-hr NOx standard should not occur until a reasonable amount of time is provided to finalize this component of the Omnibus Regulation and to perform the time consuming and costly elements required to certify to an optional 0.01 g/bhp-hr NOx standard.
- 3. Will dramatically reduce if not completely eliminate the interim air quality and climate protection benefits that would accrue to the state by continued encouragement of the purchase and deployment of 0.02g medium and heavy-duty vehicles.

Stakeholder Requests

- 1. Continue the 11.9-liter natural gas engine eligibility in HVIP.
- 2. Restore funding for all medium and heavy-duty engines that meet the 0.02 g/bhp-hr NOx emission standard.
- 3. Dedicate at least 20% of HVIP funding to 0.02 g/bhp-hr NOx engines.
- 4. Direct staff to reengage with stakeholders to expedite changes to the Carl Moyer Program to make it an acceptable "landing spot" to allow 0.02 g/bhp-hr NOx technologies (and others as they graduate).
- 5. Delay the adoption of 0.01 g/bhp-hr NOx as "near-zero" until there is an opportunity to understand the full impact of requirements (including on other incentive programs) and timing to meet them.

Background

In the FY 19-20 Funding Plan, staff recommended the graduation of all combustion technologies from HVIP, including the 11.9-liter natural gas engine. Your Board adopted the graduation (removal) of all combustion engines except for the 11.9-liter due to lack of available zero tailpipe alternatives. Importantly there was also direction given to staff to improve and modernize the Carl Moyer Program to make it an acceptable and suitable "landing spot" for those graduated technologies in conjunction with appropriate stakeholders. Stakeholders, including this coalition, supported that direction in good faith.

Carl Moyer Program Modernization

Stakeholders provided staff with an initial list of areas to improve and modernize the Carl Moyer Program. The current program is cumbersome due to its annual solicitation, evaluation, award and contracting process which typically takes 18 to 24 months. Our recommendations included:

- Removal of the vehicle pre-2010 model year and expansion to any model year scrappage requirement. This pre-2010 model year scrappage requirement is designed to support fleet turnover associated with the Truck and Bus Rule.
- Allow fleet expansion through a request to engage with the U.S. Environmental Protection Agency (EPA) on the necessity for scrappage for SIP credit.
- Simplify and expedite the application, award and contracting process.

- Allow for statewide participation (since the Carl Moyer Program is administered by Air Districts regionally).
- Allow leased vehicles eligibility.

In discussions with staff, the Voucher Incentive Program (VIP) within the Carl Moyer Program was identified as the best path to support the technologies graduated from HVIP. However, this created some challenges due to the structure of this subcomponent of the overall Carl Moyer Program including:

- Funding level
- Application eligibility
- Repower eligibility
- Fleet size restrictions

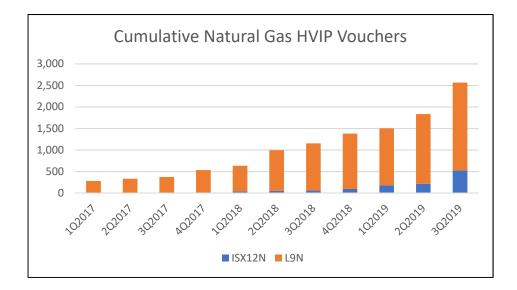
Unfortunately, after substantial effort from both staff and stakeholders, an acceptable modernization wasn't achieved as described below:

- 1. CARB declined to discuss any change or elimination of pre-2010 model year scrappage requirement, which in effect converts the Carl Moyer Program from a cost-effectiveness based, near-term ozone reduction program to a Truck and Bus Rule compliance assistance program. Fleets that can typically incorporate new, alternative fuel vehicles don't typically own/operate vehicles that are 10+ years old. These pre-2010 trucks are generally in a second or third owner. The effectively eliminates the vast majority of fleets from even qualifying to apply.
- 2. CARB did not engage with the U.S. EPA to discuss the potential for fleet expansion such that a vehicle wouldn't have to be scrapped to qualify for eligibility. Stakeholders believe there is a solid argument that these types of purchases result in SIP creditable reductions consistent with emission Averaging, Banking and Trading programs
- 3. The funding level proposed would result in 70 to 100 vehicles, a mere fraction of the volume under HVIP.
- 4. Key fleet stakeholders were explicitly excluded from eligibility including refuse (solid waste collection), transit and municipalities.
- 5. Repowers (replacement of existing engines with ultra-low NOx engines) were explicitly excluded.
- 6. CARB would only allow 10 ultra-low NOx trucks/fleet/year, further limiting the qualifying fleet pool.

Representation by CARB Staff

CARB staff has represented in a number of forums that stakeholders' demand for total and unequivocal revocation of any requirement for scrappage is the fundamental reason the discussions broke down. However, the stakeholder ask was for a venue to present an argument around the scrappage requirement.

CARB staff has portrayed that fleets have no interest in natural gas ultra-low NOx trucks as evidenced by the undersubscription of the VW Mitigation solicitation. While the VW Mitigation solicitation was undersubscribed, stakeholders contend that in reality, this is another example of an unattractive program structure. As evidenced in the chart below, the streamlined, and functional HVIP program saw steady growth in demand for natural gas technology.



Natural gas stakeholders have been supportive of being "graduated" out of HVIP with the understanding from staff that a suitable "landing spot" would be developed. We hold this same position today. However, since the necessary changes to modernize the Carl Moyer Program didn't materialize, no changes to HVIP eligibility of 0.02 g/bhp-hr NOx technologies should be made and 20% of the funding should be provided toward those solutions until a suitable "landing spot" is developed.

Adoption of 0.01 g/bhp-hr NOx as "Near-Zero"

Staff is proposing to pull this optional level forward in HVIP as a condition of eligibility. However, certifying to the MY2027 standards (both optional and baseline) is far more than meeting a 0.01 g/bhp-hr NOx value. As the name implies, the Omnibus Regulation includes changes to test cycles, extensive system aging and test protocols to name a few. It is improper for CARB staff to consider adopting this standard in isolation, without it having been fully vetted and adopted within the context of the Omnibus Regulation.

The extensive system aging alone contained in the Omnibus Regulation would effectively eliminate the ability for technologies to meet this requirement while system aging and other regulatory testing requirements, plus regulatory review of the results, occurs. Staff has suggested that all that is being asked is that manufacturers stand behind the product. On the surface that seems like a reasonable and logical request, but the reality of completing the tasks required to meet future standards takes substantial time, which isn't being considered in staff's current proposal. As has been recommended previously, incorporating an optional 0.01 g/bhp-hr NOx standard should not occur until a reasonable amount of time is provided to finalize this component of the Omnibus Regulation and to perform the (time consuming) elements required to certify to an optional 0.01 g/bhp-hr NOx standard.

This coalition continues to stand ready to work collaboratively with CARB staff and other stakeholders on these issues to bring clean air to local communities and do our part to fight Climate Change.

Sincerely,

Joy Alafia, President and CEO, Western Propane Gas Association Todd Campbell, Vice President of Public Policy, Clean Energy Ashley Duplechien, Trillium Evan W.R. Edgar, Regulatory Affairs Engineer, California Compost Coalition Sean R. Edgar, Director, CleanFleets.Net Thomas Lawson, President, California Natural Gas Vehicle Coalition Kathryn Lynch, Regulatory Affairs, California Waste Haulers Council Michael McRoberts, Chief Operating Officer, Rush Enterprises Ashley Remillard, Vice President-Legal, Agility Fuel Solutions Tom Swenson, P.E., Business Development Manager, Cummins Inc. – Natural Gas Group Mike Zimmerman, General Manager, Momentum Fuel Technologies