

Legislative Task Force CALIFORNIA CHAPTERS

October 17, 2022

The Clerk of the Board California Air Resources Board 1001 | Street Sacramento, CA 95814

Submitted Electronically

RE: **Proposed Advanced Clean Fleets Regulation**

To Whom it May Concern:

2022 OFFICERS

Chair

Doug Kobold, California Product Stewardship Council Vice Chair Chris Hanson, Placer County Hans Kernkamp, Riverside County Treasurer Herb Cantu, City of Santa Maria Secretary

On behalf of the California Chapters of the Solid Waste Association of North America's (SWANA) Legislative Task Force (LTF), we appreciate the opportunity to comment on the Proposed Advanced Clean Fleets (ACF) Regulations, specifically the State and Local Government Agency Fleet Requirements.

SWANA is the world's largest association of solid waste (more than 10,000 members). SWANA's three California chapters represent nearly 1,100 of those members. SWANA represents much of the publicly-owned and –operated solid waste management infrastructure in the state and the local governments responsible for implementing waste diversion and recycling programs. The LTF is responsible for representing the California Chapters on legislative and regulatory issues. SWANA is committed to advancing the practice of environmentally- and economically-sound management of municipal solid waste.

The solid waste sector is comprised of both public and private entities that provide a critical essential public service. In delivering these services, the sector relies heavily on on-road medium and heavy-duty vehicles. In fact, because of the extensive fleets that are necessary to provide solid waste management services, our sector has always been a target of stringent vehicle regulations that in many cases exceed those imposed on other industries with large truck fleets. Examples are the Public Heavy-Duty Fleet regulations, the requirements in some areas of the state to convert collection fleets to natural gas and stringent NOx/PM controls on off-road equipment. In addition, the new organic diversion mandates imposed by SB 1383 (Lara, 2016) on our sector are leading to management strategies that generate renewable natural gas (RNG) that could allow our truck fleets to be sustainably fueled with RNG well into the future; however, the ACF does not fully support RNG use in this way, which undermines the substantial greenhouse gas, and toxic and criteria pollutant reductions that could occur in disadvantaged communities as well as in air basins trying to achieve difficult Federal attainment standards. Overall, the proposed ACF regulations coupled with questions regarding the future reliability of the electrical grid, especially during extreme heat events and wildfire conditions, has the potential to seriously jeopardize our ability to provide reliable essential public services.

Our specific areas of concern for more detailed discussion are:

- Lack of availability of zero emission vehicles (ZEV) in the appropriate size and categories.
- Inability of commercially available ZEVs to achieve the necessary duty cycles in all situations.
- The significant investments in natural gas vehicles and infrastructure becoming stranded assets.
- The significant upfront cost to rebuild solid waste vehicle fleets and infrastructure.
- Challenges that the ACF will present to fully utilize RNG production resulting from implementation of SB 1383.
- Reliability of the electrical grid as the ACF and other carbon neutrality mandates are implemented.
- Availability of electrical vehicles during both declared and undeclared emergencies.

Insufficient recognition of the role that conversion of organic waste to fuel can play in reducing critically important methane emissions from organic waste management activities.

ZEV Mandates vs. Alternate Approaches

The proposed ACF requires ZEV truck purchases to be 50% by 2024 and 100% by 2027, with the overall goal of 100% conversion of the refuse fleet by 2040. CARB's only analysis supporting the ZEV mandate is based on what percentage of fleets travel less than 100 miles on an average day and returns to central locations, with the conclusion that this type of fleet is ready for ZEVs. This type of analysis is flawed. CARB should have begun by looking at other regulations that also support achievement of the State's climate goals, such as Cal-Recycle's SB 1383 regulatory program, to see if it is necessary to convert a fleet to ZEVs that already has a large percentage of the fleet fueled by clean natural gas, can be upgraded to ultra-low NOx engines and already has the infrastructure in place to replace natural gas with cleaner renewable natural gas that will be generated as a result of SB 1383 regulations that are currently in place. Currently, fleets with ultra-low NOx engines utilizing RNG could quickly provide the necessary pollutant reductions needed by the SCAQMD, and other air basins with similar pollution problems, to achieve aggressive Federal Clean Air Act pollutant attainment goals, toxic emission reductions in the most exposed communities, and produce carbon negative emissions. The solid waste sector has repeatedly made these comments to CARB over the years, even with support from air districts such as the SCAQMD. The LTF respectfully requests that CARB amend the ACF to allow a category for solid waste industry fleets that are willing to provide vehicles with the characteristics described above. This makes environmental sense as well as economic sense, and will allow the solid waste sector to avoid unnecessary purchases of ZEVs, building of charging infrastructure, and incurring the costs associated with the stranded assets of their existing natural gas fleets.

The solid waste sector has always shown a willingness to work with CARB and other state and local agencies to solve pollution problems. To that end, the sector would certainly be willing to purchase electric vehicles, in addition to natural gas fueled fleets, where it makes sense. However, the ZEVs that are commercially available must have demonstrated that operational needs will be met, through rugged "in- field" testing. To that end, the LTF believes that CARB should work with solid waste sector representatives to set up extensive pilot testing of vehicles under all representative conditions. The sector has a long history of this type of cooperation which not only ensures products are properly tested, but also allows our sector the ability to aid in the development of these trucks. Additionally, the ZEVs that meet our needs would need to be available at competitive prices (compared to the equivalent diesel or natural gas vehicle), fully capable of achieving the necessary duty cycles experienced in the field. If it is determined through testing that it takes more ZEVs to



complete a job compared to the existing baseline fleets, then the ACF should provide an option for these additional vehicles to be the cleanest version of conventionally fueled vehicles. The LTF recommends that CARB should allow our sector time to perform the necessary testing of ZEVs and propose what level of electrification makes sense for the solid waste sector.

Grid Development and Reliability

Reliability of the electric grid is a huge concern, as our sector provides an essential public service. Similar to the comments we provided on the Scoping Plan, we acknowledge that CARB does discuss projected electrical demands over time and the mix of renewables and batteries needed to meet projected demands, however, these are all based upon theoretical models as well as technologies that do not currently exist. The ACF Statement of Reasoning states on page 22 that, *"California's electric grid is designed to meet the highest demand, which in California occurs between 4 p.m. and 9 p.m. during the hottest days in summer."* This is simply not true. Referring to the Los Angeles Times September 9, 2022 article, *California pushed to the limit by a relentless heat wave that broke the mold*, it is described how the State's power grid faced severe shortages during this heat wave. In fact, if it wasn't for a state-wide request for all back-up generators to operate, delayed closure of a major nuclear power plant, turning on all natural gas power plants and purchasing significant amounts of out-of-state electricity, a grid collapse could have happened this summer. All this happened without the ACF mandates and for conditions CARB says will become more and more frequent with time due to climate change. Due to future uncertainties associated with the large scale and unprecedented changes to the electrical grid that must be made to meet all the carbon neutrality goals laid out by Governor Gavin Newsom, more time is needed to ensure that the grid is properly developed first, while slowly adding the additional demands, such as ZEVs and a full state-wide electrification.

Emergencies

The ACF allows for back-up vehicle exemptions and use of non-ZEVs during declared emergencies. The LTF is concerned whether this is enough for essential public services to operate uninterrupted in large-scale emergencies, such as an earthquake. We recommend CARB to flesh this out more thoroughly to establish the level of conventional vehicles and generators needed for these events. For example, the severe hurricane that recently occurred in Florida provides a picture of what could happen in disaster type emergencies. Large scale failure of the electrical grid occurred, in some cases for long periods of time, which required deployment of fleets of conventionally-fueled emergency vehicles. While California is not subject to hurricanes, we could have significant earthquakes, wildfires, and according to CARB, significantly more flooding events due to climate change. In Florida, ZEVs were rendered useless in the hurricane because of the grid collapse, and flooding led to many ZEVs experiencing fires because of the extensive electronics and lithium batteries utilized by the vehicles. We recommend CARB address these issues before the ACF is finalized.

Continuing Support for Organic Waste Diversion Activities for Reduced Methane Emissions

Considerable focus has been placed on the need to divert solid waste from landfills as critical means for reducing fugitive methane emissions. One of the most cost-effective way of meeting this need is to divert organic solid waste into strictly controlled and managed anaerobic digestion facilities to capture and produce methane for use as renewable natural gas. This can significantly contribute to reducing fugitive methane emissions to the atmosphere while at the same time producing significant Renewable Natural Gas with extremely low carbon intensity fuel for use in transportation under the Low Carbon Fuel Standard (LCFS) or in other forms of low carbon energy production. The ACF should be structured in such a way to support the continued use of organic waste to produce extremely low carbon fuels.



Regulation Off-Ramps

Finally, given the levels of uncertainty regarding implementation of the proposed ACF rule and the enormous public investments that will be needed to achieve compliance with these regulations, the LTF recommends that the regulations offer options that allow CARB, in conjunction with independent entities, to make future adjustments as needed. In response, it will likely be argued that this regulation can be modified if needed in the future, but we believe that it is important to send a signal to both the regulated community and markets for vehicles and other equipment that CARB is willing to adjust requirements as needed. The complex nature of the ACF will make implementation difficult and it is clear that flexibility will be necessary.

Conclusion

The LTF appreciates the opportunity to submit these comments and is ready to discuss them with CARB staff in more detail.

Sincerely,

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