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Re: Comment on Proposed 15-day Changes to the Proposed Regulation Order Advanced Clean Fleets Regulation State and Local Government Agency Fleet Requirements

The Cucamonga Valley Water District (CVWD) appreciates the opportunity to provide public comments to the California Air Resources Board (CARB) in response to the Proposed 15-day Changes to the Proposed Regulation Order Advanced Clean Fleets Regulation State and Local Government Agency Fleet Requirements (Proposed ACF). CVWD serves approximately 200,000 residents in its 47-square-mile-area that includes the City of Rancho Cucamonga, portions of the cities of Fontana, Ontario, and Upland and some unincorporated areas of San Bernardino County. CVWD provides potable water supply, recycled water supply, and sewer collection services to its ratepayers. Providing high quality water and first-class customer service, without interruption, has been at the core of CVWD's mission since its establishment in 1955.

CVWD requests that CARB approach the proposed ACF implementation, as the state seeks to accelerate the deployment of Medium-and-Heavy Duty (MHD) Zero Emission Vehicles (ZEVs) and Near-Zero Emission Vehicles (NZEVs), in a feasible manner that does not impose unintended consequences on public water agencies', such as CVWD, ability to provide essential services, including during emergencies.

Proposed ACF implementation must provide certainty to public water agencies to make the necessary purchases of ZEVs and NZEVs while minimizing the potential for adverse impacts in maintaining essential public health and safety services and the delivery of safe and affordable water during normal operations and extended emergency conditions. Public water agencies are essential public service providers that possess fleet vehicles with unique needs to prevent dire consequences that could result if our fleets were to be unable to accomplish core functions.

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We appreciate CARB staff's work to incorporate comments from the Association of California Water Agencies (ACWA) on real world considerations that are reflected in the latest changes to the Daily Usage, ZEV Infrastructure Delay, and ZEV Purchase exemptions to address some of our past concerns. We encourage CARB to incorporate our comments focused on specific details within the Daily Usage, ZEV Infrastructure Delay, and ZEV Purchase exemptions into the Proposed ACF ahead of CARB board adoption, and to continue engaging with stakeholders to ensure that Proposed ACF implementation considers ongoing challenges with compliance. We offer the following comments:

1. The State and Local Government Agency Fleet Exemptions (Section 2013.1) must be amended to consider additional details for successful implementation of the Proposed ACF.

1A. The Daily Usage Exemption formula should be amended to enable public fleets to use calculations that more fully consider the real-world mileage range of ZEVs.

Real world factors like aerodynamic drag and ambient temperature need to be considered when public fleets apply for a Daily Usage Exemption under the Proposed ACF. Aerodynamic drag accounts for more than half of a ZEV's energy consumption and ambient temperature can decrease range by approximately 40 percent (at 32 degrees Fahrenheit and 104 degrees Fahrenheit which are common temperatures in California). Section 2013.1(b)(3) Daily Usage Exemption¹ should be amended to consider aerodynamic drag for the increased weight of vehicles, and ambient temperatures that impact the performance range of vehicles. The range calculation method specified in section 2013.1(b)(3) should include adjustment for average drive-cycle speed and ambient temperatures, to provide a reasonably accurate basis for estimating real-world range to ensure ZEVs are not deployed for drive-cycles that they cannot complete².

1B. Public Fleets using the Daily Usage Exemption should be allowed to submit alternative data when telemetry data is unavailable.

In some situations, ZEVs will not have accessible data to calculate daily usage as required by CARB in Section 2013.1(b)(3)(A) because the ZEV has not yet been deployed, and telemetric data is also unavailable to be compared against ICE vehicles of the same weight class and configuration. Public fleets should be able to submit alternative data³, when telemetry data is unavailable to compare against ICE vehicle data, using calculations to account for what thirty consecutive workdays would amount to calculate daily usage. More specifically, public fleets should be able to submit quantitative data⁴ from reputable sources, and route maps and drive-cycle specifications to inform their exemption request.

1C. The ZEV Infrastructure Delay Exemption needs to consider extension requests past 2030.

¹ Section 2013.1(b) indicates that a Daily Usage Exemption may be requested when no suitable ZEV or NZEV can be found to meet the existing vehicle's daily use requirements e.g., range requirements. In section 2013.1(b)(3) it goes on to say that ZEV range is to be calculated by dividing rated energy capacity by fixed kilowatt hour per mile factors that are not adjusted for speed or ambient temperature.

² [TerraVerde Energy](#) explains the relationship between vehicle weight and energy consumption, discuss ambient temperature impacts on EV range, explain how we calculate the onboard battery storage (kWh) capacity needs of these vehicles, and we reveal the significant challenge that many water agencies will face in finding suitable, feasible EV replacements.

³ A fleet owner should be able submit calculated ZEV energy use data using fundamental physics calculations, drive-cycle speed, distance and ZEV specifications like GVWR and frontal area e.g., $\frac{1}{2}mv^2$ (kinetic energy; $m = \text{GVW}$), $\frac{1}{2}pv^3ACd$ (aero drag), and data from reputable studies dedicated to quantifying the relationship between BEV range and ambient temperature.

⁴ ZEV energy use data using fundamental physics calculations, drive-cycle speed, distance and ZEV specifications like GVWR and frontal area e.g., $\frac{1}{2}mv^2$ (kinetic energy; $m = \text{GVW}$), $\frac{1}{2}pv^3ACd$ (aero drag), and data from reputable studies dedicated to quantifying the relationship between ZEV range and ambient temperature.

It is essential that the ZEV Infrastructure Delay Exemption works effectively to enable public fleets to make and receive exemption requests until charging infrastructure and power is available to meet fleet needs, which may be required past 2030. Section 2013.1(c) ZEV Infrastructure Delay Exemption more clearly describes the steps that public fleets must take to ensure that exemption requests are approved when public fleets can appropriately document ZEV infrastructure construction delay (Section 2013.1(c)(1)) or ZEV Infrastructure Site Electrification Delays (Section 2013.1(c)(2)). CVWD appreciates the clarity that this exemption enables fleets to proceed with purchasing ICE vehicles where necessary to ensure that fleets can continue to provide services to their communities. However, CVWD has expressed concern throughout the Proposed ACF process that electric utilities throughout the state will not yet have necessary charging infrastructure and power required to service public fleets at the start of compliance with the Proposed ACF, and we maintain this concern. We recommend that CARB amend remove “Until January 1, 2030” from A-1-27 to allow public fleets to request site electrification delays until electric utilities can provide the requested to power.

A-1-27-A-1-28

ZEV Infrastructure Site Electrification Delays. ~~Until January 1, 2030.~~ fleet owners may request this extension if their electric utility provider determines it cannot provide the requested power to the site where ZEVs will be charged or refueled before the fleet's next ZEV compliance deadline.

1D. The ZEV Purchase Exemption application needs to consider public health amongst safety laws and standards that public water agencies are subject to.

The CARB Executive Officer should consider state and federal public health laws and standards amongst criteria to determine if a ZEV or NZEV is available to purchase to comply with the Proposed ACF. Public water agencies are subject to public health and safety laws and standards (Federal and State) as they manage water main breaks, sewer spills, and other issues that, if not taken care immediately, constitute a public health and safety risk for communities in California. Public water agencies need to be able to deploy fleet vehicles to accomplish goals and standards they are subject to and should be able to effectively communicate when available ZEVs prevent this. CARB should, on A-1-34, amend Section 2013.1(d)(2)(D)(5) to specifically identify “public health” amongst safety laws or standards that the CARB Executive Officer could consider to be in conflict with complying with the Proposed ACF.

A-1-34

5. ZEVs or NZEVs do not conflict with safety standards, including public health standards, that the fleet owner is subject to. if applicable. as prescribed under title 8, CCR by the California Department of Industrial Relations, Division of Occupational Safety and Health, comparable federal or state health and safety laws where the vehicle operates, or federal highway safety laws.

1E. The ZEV Purchase Exemption application should not require public water agencies to purchase a higher weight class vehicles.

Denial of a ZEV Purchase Exemption application, as described in Section 2013.1(d)(2)(E), on the grounds that higher weight class ZEV is available for purchase is concerning for a variety of reasons to public water agencies. The additional upfront cost to purchase the higher weight class vehicle may be prohibitively expensive. Requiring a public water agency to purchase an even more expensive vehicle only adds to the concern about the cost of compliance while navigating the public procurement process to replace fleet vehicles. Additionally, the demand that will be generated to purchase these higher weight vehicles may make this more expensive vehicle also unavailable if out of stock due to numerous public water agencies competing for limited vehicles manufactured. Lastly, higher weight vehicles may have more demanding charging infrastructure needs that are not accounted for by the public water

agency or electric utilities responsible for building infrastructure and supplying power to public water agencies. For these reasons, we recommend that CARB, on A-1-34, amend Section 2013.1(d)(2)(E) to remove “or next higher weight class, except for Class 8 vehicles which must only be in the same weight class” to only justify denial of an Application if the Executive Officer discovers a ZEV or NZEV chassis or complete ZEV or NZEV in the same weight class.

A-1-34

E. If the Executive Officer identifies any manufacturer or authorized dealer that offers for sale a ZEV or NZEV chassis or complete ZEV or NZEV in the same ~~or next higher weight class, except for Class 8 vehicles which must only be in the same weight class,~~ in the needed configuration, with the needed frame attachments. and on which the identified body submitted in section 2013.1 (d)(2)(A) or an equivalent body from another manufacturer or authorized dealer that can perform the same primary intended function can be installed, the Executive Officer will supply the manufacturer or authorized dealer name to the fleet owner applicant, deny the exemption request, and remove the vehicle configuration from the ZEV Purchase Exemption List pursuant to section 2013.1 (d)(2)(G).

2. The 13 Year Model Replacement Requirement (required in Section 2013.1) to replace an ICE vehicle should be amended to be consistent with existing California Code Useful Life standards.

CARB should base its model year replacement requirement, for public fleets requesting exemption, on existing California statute which sets useful life for many MHD at 10-11 years. California Code of Regulations, Title 13 Section 2112(l) (California Code)⁵ provides useful life standards for MHD internal combustion engine (ICE) vehicles through 2031 and beyond. Section 2013(n)(4), as written, unnecessarily prevents public water agencies from replacing ICE vehicles earlier than 13 years past model year, if needed. The 13 Year Replacement Requirement added to section 2013(n)(4) of the Proposed ACF appears to parallel the standard set in Senate Bill 1 Section 43021(a)(1)⁶ (SB 1) to set the useful life of MHD at 13 years. SB 1 prevents regulators from requiring California vehicle owners to retire, replace, retrofit, or repower their trucks within 13 years of the model year (or before the vehicle travels 800,000 miles). However, SB 1 does not require vehicle owners to retain MHD for 13 years. California Code more definitively frames useful life based on model year. Public water agencies must use their best engineering judgement to consider whether their existing fleet vehicles are performing or need to be replaced to meet their fleets’ operational needs while observing California Code. We therefore recommend that CARB replace all three instances of “ICE vehicle being replaced reaches 13 years old” on A-1-18 with “with ICE vehicles being replaced reflects Useful Life in California Code of Regulations, Title 13 Section 2112(l), or is no longer serviceable”.

A-1-18

Section 2013(n) (2-4)

Fleet owners must request and obtain this exemption pursuant to the criteria specified in section 2013.1 (b-d2) no earlier than when the model year of the ICE vehicle being replaced reaches 13 years old with ICE vehicles being replaced reflects Useful Life in California Code of Regulations, Title 13 Section 2112(l), or is no longer serviceable.

3. CARB should revisit performance of the Proposed ACF ahead of 2028.

⁵ [California Code of Regulations, Title 13 Section 2112](#) set useful life standards for MHD with model years through 2031 and beyond.

⁶ [Senate Bill 1](#) states that replacement “shall not be required” until “13 years from the model year” or “When the vehicle reaches the earlier of either 800,000 vehicle miles traveled or 18 years from the model year”.

Due to the elevated level of stakeholder engagement and concern with the Proposed ACF being a first of its kind regulation to decarbonize fleet vehicles, CARB should preemptively plan to review the performance of fleet compliance with the Proposed ACF following adoption, and ahead of the next planned regulatory action in 2028. CVWD and other essential public service providers have expressed concerns throughout development of the Proposed ACF of the ability to account for issues that may make compliance difficult, including the comments raised above. CARB Board Members, and CARB staff have acknowledged the need to be nimble to successfully implement the Proposed ACF because of the many uncertainties that will need to be addressed to meet the State's goal to electrify fleets everywhere feasible. We recommend that CARB develop a resolution pending adoption of the Proposed ACF to revisit the performance and impacts of the Proposed ACF ahead of the State Implementation Plan⁷ requirement to revisit and refine existing programs to decarbonize vehicle emissions.

4. Conclusion

We appreciate the opportunity to comment on the Proposed ACF and continue to do so because we want to provide feedback to inform the Proposed ACF to make implementation easier. CVWD hopes to continue conversations with CARB staff and Board Members regarding the Proposed ACF even after potential adoption as we see implementation being an ongoing conversation to address real world issues impacting public water agencies. Please do not hesitate to contact Rob Hills at robh@cvwdwater.com or (909) 987-2591, if you have any questions regarding CVWD's input.

Sincerely,



John Bosler, PE
General Manager/CEO

cc: The Honorable Liane Randolph, Chair, California Air Resources Board
The Honorable Sandra Berg, Vice Chair, California Air Resources Board
The Honorable E. Joaquin Esquivel, Chair, California State Water Resources Control Board
Dr. Steven Cliff, Executive Officer, California Air Resources Board
Mr. Craig Segall, Deputy Executive Office, California Air Resources Board
Dr. Sydney Vergis, Division Chief, Mobile Sources Division, California Air Resources Board
Mr. Dave Eggerton, Executive Director, Association of California Water Agencies
Ms. Cindy Tuck, Deputy Executive Director for Government Relations, Association of California Water Agencies

⁷ [CARB State Implementation Plan](#) requires CARB to revisit vehicle decarbonization programs in 2028.