



March 7th, 2023

Chair Liane Randolph
California Air Resources Board
1001 I Street, Sacramento, CA 95814

Mr. Gideon Kracov, Esq.
South Coast Air Quality Management District Member
California Air Resources Board

Dr. Susan Shaheen
Automotive Member
California Air Resources Board

Via: Electronic Submission

SUBJECT: Transfer Flow, Inc.'s Public Comment on The California Air Resources Board Advanced Clean Fleets Regulation.

Dear Chair Randolph and California Air Resources Board Members,

Transfer Flow, Inc. is pleased to submit our written comments to the California Air Resources Board (CARB) regarding the Advanced Clean Fleets Regulation (ACF).

Transfer Flow has been in business in beautiful Northern California since 1983, manufacturing high-quality liquid fuel systems. As the industry's leading California-legal aftermarket fuel system manufacturer, Transfer Flow is a knowledgeable and proficient voice within the transportation industry. Throughout the years, Transfer Flow has been issued over 300 aftermarket executive orders. Transfer Flow has and will continue to participate in the rulemaking process. In 2016, Transfer Flow received the small business of the year award from the California State Assembly. Our comments are as follows:

The overwhelming volume of feedback from industry CARB has received and disregarded is disturbing. This regulation has clearly been developed by professionals who have spent their entire careers in academia or government and have no actual experience in the field. To develop robust regulations, CARB staff should be incorporating feedback from industry experts. As any good engineer can tell you, what looks good on paper is not always practical in the real world, which is why designs need to be validated through real-world testing. Given the amount of concern coming from industry, it is doubtful this regulation will roll out anywhere near what CARB staff is expecting.

What is even more concerning is the feedback CARB is receiving is coming from organizations that want to contribute to combating climate change, yet CARB is so gung-ho on the ridiculous and impractical, electrify everything strategy CARB staff refuse to accept feedback or alternative proposed solutions from industry experts. Typically, the only people that support this regulation are non-technology-savvy people who think zero tailpipe emissions equate to zero lifecycle emissions.

An partial list of public service organizations that have reached out to CARB in opposition to this regulation include:

Big Bear City Community Services District
Bonita – Sunnyside Fire Protection District
Borrego Water District of San Diego County
Calaveras County Water District
City of Arcata
City of Bell Gardens
City of Brentwood
City of Clovis
City of Fremont
City of Rocklin
City of Roseville
City of Pleasanton
City of Sacramento
City of San Leandro
City of Santa Barbara
City of West Hollywood
Conejo Recreation and Park District



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Contra Costa Water District
County of Del Norte
County of Humboldt
County of Los Angeles Department of Public Works
County of Nevada Board of Supervisors
County of Placer
Cucamonga Valley Water District
Eastern Municipal Water District
El Dorado Irrigation District
Fresno Mosquito and Vector Control District
Goleta West Sanitary District
Imperial Irrigation District
Indian Wells Valley Water District
Los Angeles Department of Water and Power
Mesa Water District
Metropolitan Water District of Southern California
Modoc County Road Commissioner
North of River Sanitary District
North Tahoe Public Utility District
Otay Mesa Chamber of Commerce
Rancho California Water District
San Diego County Water Authority
South Placer Municipal Utility District
Truckee Donner Public Utility District
Truckee Sanitary District
Tuolumne Utilities District
Turlock Irrigation District
Twentynine Palms Water District
Ventura River Water District
Vista Irrigation District
West Valley Mosquito and Vector Control District

Trade organizations that have also expressed opposition to the Advanced Clean Fleets Regulation include:

California Association of Sanitation Agencies



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California Municipal Utilities Association
State Building and Construction Trades Council of California
Western States Trucking Association

Despite the considerable opposition industry is expressing, there is a universal sentiment that climate change is an important issue that needs to be addressed. In response, industry is offering real-world, proven solutions industry is willing and ready to adopt. Yet, CARB is ignoring the well-thought-out solutions from people who have been working in the field their entire careers and treating proposed solutions as non-viable. CARB staff is refusing to consider the overwhelming feedback from industry expressing significant concerns.

CARB wants to talk a lot about “stranded assets,” yet CARB staff does not acknowledge the stranded assets of all the waste management and water management public utilities that have already invested in anaerobic digesters and equipment that is powered from their own, locally produced, and consumed, carbon-negative, and near-zero NOx, fuels. CARB staff is imposing upon Californians the most expensive and impractical way possible to reduce greenhouse gas emissions. How many stranded assets will result from CARB staff not heeding industry’s concerns?

The public service entities expressing concern over CARB’s proposed concepts have no other skin in the game other than they’re trying to offer to the citizens of California essential services. These public service entities do not have an infinite capacity to play around with changing fleets over to equipment that does not meet the required needs of the fleet. Even though these public service entities are offering acceptable solutions, CARB has made no effort to accommodate the need for carbon-negative, near-zero NOx biofuels as having an essential place within a sustainable future.

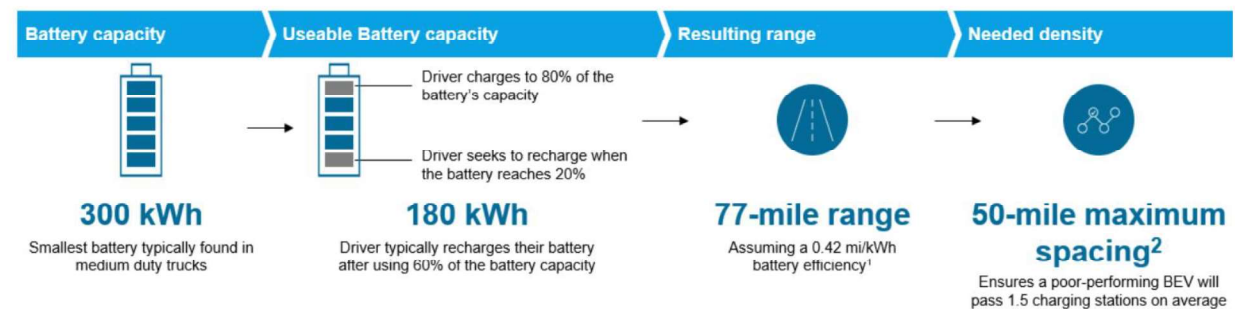
The proposed Advanced Clean Fleets regulation is filled with endless extensions and exemptions to the rule, but the alternative to battery-electric is to continue to use diesel-powered equipment. CARB’s lack of a fuel and technology-neutral approach is serving as a backstop to continue the use of petroleum-based fossil fuels while awaiting a lengthy and expensive build-out of the electric infrastructure grid, which may or may not be implemented as seamlessly as CARB staff is predicting. The basic strategy of electrifying everything delays our dependency on fossil fuels and falls short of immediately reducing greenhouse gas emissions with currently available technologies as well as significantly mitigating short-term criteria pollutants methane, black carbon, and CO2.

CARB staff is demonstrating a fundamental lack of understanding of the industry they are trying to regulate, including not understanding that electric pickup trucks contain nowhere near the towing capacity of a conventionally powered pickup truck or that there is no such thing as dedicated snow-plow equipment. All snow-plow equipment is repurposed for other uses during the summer. Many public service organizations need more towing capacity than an electric truck offers.

Even the California Transportation Commission's own technical memorandum dated March 8th, 2023,¹ shows that a medium-duty truck with a 300kWh battery would have a resulting range of 77 miles. How are Californians supposed to efficiently transport goods or provide essential services in an economy tethered by vehicles with a 77-mile range?

Below is an excerpt from the CTC's technical memorandum discussed above.

Exhibit 10. Approach to Establish Minimum Viable Network for Battery Electric Vehicles



In addition to CARB's impractical Advanced Clean Fleets proposal, CARB staff can only show fleet owners that heavy-duty charging will be installed along the six freight corridors as identified by the CTC. Outside of those freight corridors, fleet owners are responsible for installing their own charging infrastructure. We're not discussing technology someone can just run an extension cord out their bedroom window to charge overnight. So besides being forced to procure new equipment regardless of how clean the equipment already in operation might be because it could get dirty someday, CARB is also requiring fleet owners to install their own fleet charging infrastructure and not giving fleets the option to switch to cleaner, more accessible, practical, and affordable options such as anaerobic digestion. Even though those same fleets under SB-1383 are required to clean up the same methane, CARB will no longer

¹ <https://catc.ca.gov/-/media/catc-media/documents/programs/sb671/sb671-technical-memo-030923-a11y.pdf>

allow them to use it to power their equipment. The Advanced Clean Fleets regulation does contain a small carve out for waste management companies; it also prohibits other industries ill-suited for electrification, the ability to adopt clean biofuels as an environmental solution even though industry is telling CARB staff this is the correct solution for their needs, not to electrify everything, and CARB is refusing to acknowledge the needs and concerns of industry.

CARB's idea that all internal combustion engines must be made illegal because all internal combustion engines create NOx is simply not true. There are hydrogen-powered engines currently being developed that create zero NOx^{2,3,4}. If electricity-generating power plants don't create NOx, then why is the South Coast Air Quality Management District conducting rule-making activity to limit NOx from electricity-generating power plants; Proposed Amended Rule 1135?⁵ Why is the NOx created by generating electricity given priority over near-zero NOx created by burning carbon-negative biofuels to perform essential functions of society?

CARB staff claims that they must outlaw all internal combustion technologies regardless of how clean they might be to "send a market signal," but it is not CARB's job to send a market signal or advocate for electric vehicles. It is CARB's job to clean the air. The overwhelming opposition expressed by industry clearly illustrates CARB's abuse of discretion by inhibiting industries' ability to simultaneously do their part to clean up the environment and continue to provide essential services for Californians.

The very week after CARB passed the Advanced Clean Cars II regulation, The California Independent System Operator had to ask Californians to not charge their electric cars due to a lack of grid capacity⁶. Hence undermining the public's trust in CARB's ability to make reasonable decisions. The Advanced Clean Fleets regulation will only serve to continue to deteriorate the public's trust in CARB to act in the best interest of the public. If CARB were interested in the best interest of the public, CARB would listen to stakeholder and industry feedback regarding the best solution to combat climate change while simultaneously meeting the needs of the people of this great state.

² <https://www.wardsauto.com/industry-news/cummins-becoming-big-player-hydrogen-transition>

³ https://learning.sema.org/products/hydrogen-fueled-ice-for-performance-application#tab-product_tab_overview

⁴ <https://www.youtube.com/watch?v=asQIIWVMV8Y>

⁵ <http://www.aqmd.gov/home/rules-compliance/rules/scagmd-rule-book/proposed-rules/rule-1135>

⁶ <https://www.nytimes.com/2022/09/01/us/california-heat-wave-flex-alert-ac-ev-charging.html>



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For these reasons, Transfer Flow continues to respectfully oppose the adoption of CARB's Advanced Clean Fleets Regulation.

Sincerely,

A handwritten signature in blue ink that reads 'Laurel Moorhead'.

Laurel Moorhead, E.I.T.
Regulatory Compliance Engineer