August 21st, 2023

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

Dr. Susan Shaheen
Automotive Member
California Air Resources Board

Mr. Gideon Kracov, Esq.
South Coast Air Quality Management District 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 Second Notice of Modified Text and Availability of Additional Documents.

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) Second Notice of Public Availability of Modified Text and Availability of Additional Documents.

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. In 2016, Transfer Flow received the Small Business of the Year Award from the California State Assembly. Transfer Flow has and will continue to participate in the rulemaking process. Our comments are as follows:

CARB's reasoning for refusing to conduct a full lifecycle, or well-to-wheel analysis, of electric vehicles and greenhouse gas emissions relies on flawed logic. Page 18 of the Response to Comments on the Draft Environmental Analysis Prepared for the Advanced Clean Fleets

Regulation[1] reads, "Ford and academic researchers have performed national full lifecycle studies for light-duty trucks that indicate in comparison to conventional vehicles, the lower GHG emissions from operating BEVs more than offsets the higher GHG emissions associated with manufacturing BEVs. The study found that production emissions are surpassed once the BEVs accrue around 25,000 miles, which is typically around the time the BEV is one and a half years old. Over the lifetime of the BEV, the study calculated approximately 64 percent lower cradle-to-grave life cycle emissions than ICE vehicles."[2]

The flawed dilemma with using Ford's study to justify refusing to conduct a lifecycle emissions analysis is that Ford's study only compares BEVs to traditional petroleum-based fossil-fueled-powered vehicles and fails to compare BEVs to other clean technologies such as renewable hydrogen and other bio-fuels, particularly deeply carbon-negative renewable natural gas.

Further down page 18 of the Response to Comments on the Draft Environmental Analysis Prepared for the Advanced Clean Fleets Regulation reads, "The Department of Energy's cradle-to-grave lifecycle GHG emission analysis for small sport utility vehicles found that **FUTURE** BEVs and fuel cell vehicles (FCEVs) would have lower lifecycle emissions than **[CURRENT]** ICE vehicles even the lowest carbon intensity drop-in renewable fuel, while current BEVs, FCEVs, and PHEVs have lower lifecycle emissions than any **[CURRENT]** ICE vehicle or hybrid gasoline vehicle."[3]

Although **CURRENT** BEVs may be cleaner than **CURRENT** gasoline-fueled ICEs, It is illogical to base the exclusion of **CURRENTLY** available renewable fuel technologies based on projected **FUTURE** BEV technologies. To conduct an impartial comparison of BEV technologies to renewable fuel technologies, CARB must compare **CURRENT** BEV technologies to **CURRENT** renewable fuel technologies. If CARB wants to compare the projected capabilities of **FUTURE** BEV technologies, they must be compared to **FUTURE** renewable fuel technologies. To refuse to conduct relevant apples-to-apples comparisons is not only a disservice to both the citizens of the great State of California and the environment but, we feel, an abuse of discretion committed by CARB staff.

Page 22 of the Response to Comments on the Draft Environmental Analysis Prepared for the Advanced Clean Fleets Regulation reads, "There is no basis to limit engines by fuel type, and any significant expansion of CNG truck sales would also require new CNG infrastructure to store

[1] https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/acf22/acfrtc.pdf
[2] https://media.ford.com/content/fordmedia/fna/us/en/news/2022/03/04/new-study-finds-greater-greenhouse-gas-reductions-for-pickup-tru.html
[3] https://www.hydrogen.energy.gov/pdfs/21003-life-cycle-ghg-emissions-small-suvs.pdf

and/or dispense the fuel which could result in stranded assets when ZEVs do become available."

CARB staff states that "THERE IS NO BASIS TO LIMIT ENGINES BY FUEL TYPE," yet electricity is being used as a fuel type that CARB staff is attempting to use to limit the use of other fuel types, regardless of how clean those alternative fuel types may prove to be.

CARB is limiting the expansion of known, clean technologies under the guise of "stranded assets" because that known clean technology would require new infrastructure but is spending billions of taxpayer dollars on building up the electric vehicle charging infrastructure. Refusing to support bio-fuels or hydrogen because it requires infrastructure build-up while only supporting BEVs is entirely irrational.

The government should not pick winners and losers regarding automotive technologies; the market should drive technology solutions. Californians would benefit tremendously if corporate welfare was eliminated and the job of picking automotive technology winners and losers was left to market forces.

It is imperative that CARB fairly and accurately revisits the lifecycle emissions analysis assessment of the emission impacts of alternatively-fueled vehicles as compared to BEVs.

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

In closing, Transfer Flow would like to thank CARB staff for the opportunity to comment, and we look forward to being a productive part of positive change within the liquid fuels industry.

Sincerely,

Laurel Moorhead

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