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May 17, 2021

Ms. Liane M. Randolph
Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95812

(Comment submitted electronically via https://www.arb.ca.gov/lispub/comm/bclist.php with cc to craig.segall@arb.ca.gov, jennifer.gress@arb.ca.gov, joshua.cunningham@arb.ca.gov, and dvind@pearsonfuels.com)

RE: Proposed Clean Miles Standard

Dear Chair Randolph,

RTC Fuels, LLC dba Pearson Fuels ("Pearson Fuels") appreciates the opportunity to provide comments regarding the California Air Resources Board's ("CARB") Proposed Clean Miles Standard ("Proposed CMS"). This comment recommends that the Proposed CMS regulations be modified to enable the use of a proven and cost-savings greenhouse gas emission ("GHG") reduction strategy: the use of high blend ethanol ("E85") in certified flex fuel vehicles ("FFVs"). An E85/FFV provision will enhance the Proposed CMS by providing a GHG reduction strategy that:

- leverages California's existing but underutilized FFV fleet to cut lifecycle GHG emissions by approximately one-third per vehicle switched to E85;
- can be immediately implemented to lower GHG emissions from the estimated 32,000 FFVs that are already part of the Transportation Network Company ("TNC") fleet;
- can be further expanded by converting conventional gasoline TNC vehicles into FFVs via CARB-certified aftermarket conversion technologies;
- will save TNC drivers money at the pump and keep low-income TNC drivers employed; and,
- will better preserve TNC service in low-income neighborhoods than the Proposed CMS.

E85 sold at retail stations in California offers FFV owners significant cost savings compared to unleaded gasoline, with a historical analysis of E85 pricing in Los Angeles county showing an average price discount for E85 of $1.12 per gallon below regular unleaded over the past two years. As a result of price discounts throughout the state, E85 sales in California have achieved a year-on-year growth rate of 30% relative to gasoline over the past 15 years.

Innovative Fuel Distributor

Pearson Fuels is the largest distributor of E85 in California. The company supplies 222 retail E85 stations under long term contract and 46 government locations, resulting in a total E85 footprint of 268 locations. Pearson Fuels continues to open 5-7 new E85 Stations per month. The company was founded in 2002 by three business associates that owned and managed one of San Diego's oldest and most respected car dealerships, Pearson Ford. Seventeen years ago, Pearson Fuels opened a retail station on El Cajon Boulevard in San Diego that was the first E85 station in the State of California, the first biodiesel station in San Diego, and San Diego's County's first dual pressure natural gas station. Subsequently named Pearson Fuel Depot, the retail station also became the county's first propane vehicle fueling station and was the first local independent station to offer ultra-low sulfur diesel. Pearson Fuels continues to be an innovative fuel distributor having developed two large wholesale biodiesel blending terminals, three biofuel transload facilities, and provides the only E85 fuel rack in California which replaces the gasoline component of E85 with renewable naphtha thereby producing a fully renewable, low aromatic and carbon reducing E85. Pearson Fuels is committed to providing a diversity of cleaner fuels that fit the needs of consumers and the goals set forth by both federal and state programs.

The Integration of an FFV/E85 crediting component into the program will reduce the foreseeable economic harm to low-income drivers and service disruption to low-income communities that the Proposed CMS will cause. As a result, CARB is mandated by several California laws and by SB 1014 to include an FFV/E85 crediting component.

Pearson Fuels recommends that CARB leverage the proven GHG reduction capabilities of FFVs and E85 to speed GHG emission reductions and to improve the cost-effectiveness of the CMS while reducing the negative financial impacts of the program on low- and middle-income drivers and the reduction of service to disadvantaged communities. A review of the rulemaking package coupled with the historical record establishes that EVs are overwhelmingly purchased by wealthy Californians, that charging stations are scarcely available in disadvantaged communities, and that Black and Hispanic neighborhoods have even lower access to public chargers. The rulemaking record and CARB's own research on these issues is unambiguous. As a result, the impending harm is easily foreseeable, and CARB must alter the Proposed CMS regulation to mitigate the harm. There is no more prudent mitigation option than for CARB to recognize in the CMS regulation the GHG reductions that can be achieved from switching existing TNC vehicles to a less GHG polluting and less expensive fuel.

In research commissioned by CARB, it was found that during the period 2010 to 2015, neighborhoods in the top 25% by socio-economic status purchased over ten times more plug-in electric vehicles than neighborhoods in the bottom 25%. In additional to household income, access to single family homes has a very large and positive correlation with EV purchasing.[1] This is attributable to the practical need of EV owners to charge their vehicles, which is most

[1] Principal Investigator DeShazo, JR, "Factors affecting plug-in electric vehicle sales in California," Report Published May 2017, summary at https://ww3.arb.ca.gov/research/single-project.php?row_id=65197; full report at https://ww2.arb.ca.gov/sites/default/files/classic//research/apr/past/13-303.pdf .

easily and cost-effectively done via home charging. In an analysis completed by the National Renewable Energy Laboratory, it was found that charging costs for EVs vary widely from $0.08/kWh to $0.27/KWh. California has one of the highest state-level levelized cost of light-duty EV charging in the United States at $0.18/kWh.[2] That levelized cost would be higher still if not for the ability of wealthy California EV owners to charge at home and at off-peak hours at night.

By contrast, at-home charging opportunities are scant in disadvantaged communities with few single-family residences where most TNC drivers live. As a result, TNC drivers will be forced to rely on public charging stations and will access DC fast-charging stations that will enable them to return to work quicker. DC fast-charging stations can be extremely costly, with NREL finding costs per kWh ranging from $0.10/kWh to $2.00/kWh.[3] The situation for low-income drivers and disadvantaged communities is further worsened by the racial disparities of charging station availability. Dr. Kevin Fingerman and Chih-Wei Hsu recently published a report entitled "Public electric vehicle charger access disparities across race and income in California," that concluded:

- *Public EV charger access disparities were found based on race and income in California.*
- *The charger access gap is larger at locations with more multi-unit dwellings.*
- *Black and Hispanic majority-neighborhoods have lower access to public EV chargers.*
- *The same neighborhoods have even lower access to publicly funded chargers*.[4]

The necessity of integrating environmental justice and equity into GHG policymaking is now firmly embedded in California law. California's overarching GHG-reduction laws and SB 1014 unambiguously require that CARB include this cost-savings GHG reducing strategy into the program. A close review of the rulemaking record establishes the economic and service harm the Proposed CMS will foreseeably cause.

The starting point for this analysis is the rapid reduction in GHG emissions that are mandated in the first five years. The Base Year Inventory Report states, "CARB staff estimates that the 2018 TNC vehicle fleet emitted 301 gCO_2e/ PMT." Comparing this with Table 1 of the Proposed Regulation, the GHG target for 2023 is 252 gCO_2e/ PMT. This establishes a business-as-usual ("BAU") decline of 10 gCO_2e/ PMT during the five-year time period 2018-2023. From this BAU baseline, the Annual GHG Targets contained in Table 1 of the Proposed Regulation rapidly increase to 15 gCO_2e/ PMT in 2024, 30 gCO_2e/ PMT in 2025, 46 gCO_2e/ PMT in 2026, and 51 gCO_2e/ PMT in 2027. The Proposed Regulation relies almost exclusively on an electrification strategy to achieve these GHG reductions. However, as stated in the Initial Statement of Reasons:

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[2] See Figure 2, National Renewable Energy Laboratory, "Levelized Cost of Charging Electric Vehicles in the United States," June 2020, https://www.cell.com/joule/fulltext/S2542-4351(20)30231-2.
[3] Id. at p. 1481.
[4] Chi-Wei Hsu, Kevin Fingerman, "Public electric vehicle charger access disparities across race and income in California," Transport Policy (January 2021).

"But staff recognizes that some drivers, particularly those that are lower income and do not have easy access to funds for the incremental cost of a new or used ZEV, still will have challenges. With the exemption from AB 5 labor rules granted to TNC companies in the adoption of Proposition 22 in 2020, there is no assurance TNCs will pay drivers for the extra costs of electrification.

To the extent that CARB does not integrate a crediting mechanism to incentivize the use of E85 in TNC FFVs, CARB will have missed an opportunity to design a better CMS program that would have delivered GHG reductions to California more quickly and cost-effectively. **Given the proven cost savings of E85 compared to gasoline**, the following statutory authority mandates the inclusion of an FFV crediting provision in the TNC with key language underlined for emphasis:

- California Health & Safety §38560 (the California Global Warming Solutions Act of 2006) provides that, "The state board shall adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions from sources or categories of sources, subject to the criteria and schedules set forth in this part."
- California Health & Safety Code §38562(b)(2) provides that in adopting GHG regulations, CARB shall "Ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities."
- SB 1014 includes two crucial provisions regarding the impact of the Clean Miles Standard on low-income drivers and citizens and provides that, "The commission shall additionally do all of the following: (1) Ensure minimal negative impact on low-income and moderate-income drivers. (…) (3) Support the goals of clean mobility for low and moderate-income individuals."
- SB 1014 provides that, "The Board shall delay adoption, and the commission shall delay implementation, of the targets and goals pursuant to paragraph (2) if the board or commission finds that unanticipated barriers exist to expanding the usage of zero-emission vehicles by transportation network companies."
- California Government Code §11346.2(b)(4)(A) requires CARB to consider and evaluate reasonable alternatives to the proposed regulatory action and provide reasons for rejecting those alternatives. Section 11346.2(b)(4)(A) also requires, "A description of reasonable alternatives to the regulation that would lessen any impact on small business and the agency's reasons for rejecting those alternatives."

Proven GHG Reduction and Other Policy Benefits of E85

Blend Level Flexibility

There are approximately 22 million FFVs registered in the U.S. today.[5] This equates to a little less than 10 percent of the US gasoline powered vehicle fleet. According to California vehicle registration data, there were approximately 1.2M FFVs registered in the state in 2016, 1.23M FFVs registered in 2017, and 1.3M FFVs registered in 2018.[6] The flexible capabilities of these vehicles support consumer choice at the pump. FFVs can legally and without any risk of regulatory or warranty breach use a wide range of any gasoline-ethanol blends up to 85 percent ethanol. This flexibility is good for the consumer, the retail fuel marketers, and supports state and federal renewable fuel requirements and policy objectives.

FFV aftermarket conversion kits are relatively new in the US market but have proven to be extremely effective as a GHG reduction strategy in Europe. Pearson Fuels has reviewed the comment of StepOne Tech America Inc. to this rulemaking, and Pearson Fuels fully supports StepOne's comment. Pearson Fuels recognizes that the certification of aftermarket conversion kits must be fully approved by CARB before this additional strategy can be implemented. However, given the recent decline in FFV manufacturing by the automakers, Pearson Fuels encourages CARB to fully engage with StepOne and other aftermarket technology companies to enable review and certification of these technologies.

Cost Savings to the American Public

Californians have embraced E85 fuel with the largest state gasoline market in the country showing 40% year on year growth in E85 sales surging from less than 2 MGY in 2009 to almost 34 MGY in 2018 with a typical year-on-year growth rate of 25-30%. CARB tracks the E85 use on a monthly basis as part of implementation of the California E85 fuel specification regulation, found at title 13, California Code of Regulations §2292.4. Fuel suppliers are required to report to CARB all E85 blending that occurs in California. CARB receives reports of E85 sales for use in flex fuel vehicles that represent virtually all the E85 sold in the state. The following chart illustrates this remarkable growth and the attached Exhibit A contains the annual totals of E85 demand and year-on-year growth.[7] Over the last fifteen years, the only year when E85 sales did not grow dramatically was 2020, a year when gasoline consumption dramatically dropped while E85 consumption remained stable.

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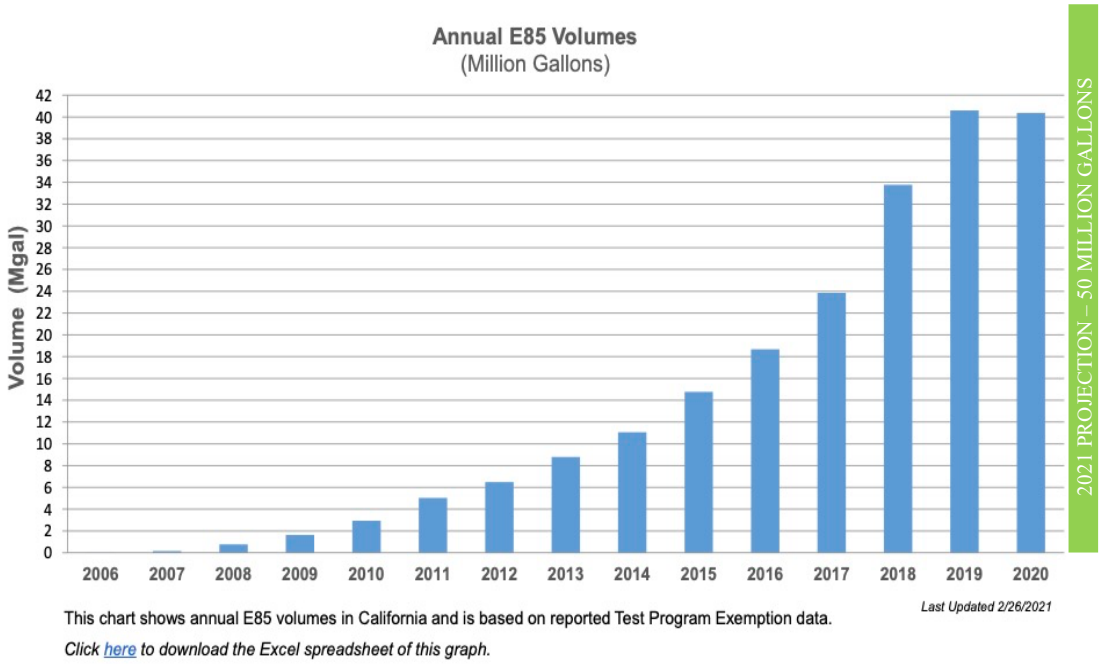
[5] According to figures from IHS Markit there are 21,818,980 flexible fuel vehicles registered in the U.S. as of 2018.

[6] While Pearson Fuels submitted a California Public Records Act Request to the California Department of Motor Vehicles (DMV) to obtain precise number of FFV registrations, DMV advised that it did not have the requested information. However, Pearson was successful in obtaining unofficial FFV registration figures from other California state Agencies and thus is able to provide these approximate FFV registration figures at this time.

[7] California Air Resources Board, "E85" website found at https://ww3.arb.ca.gov/fuels/altfuels/e85/e85.htm, chart of E85 volumes at https://ww3.arb.ca.gov/fuels/altfuels/e85/annuale85vol_02-2019.pdf , spreadsheet of annual volumes at http://www.arb.ca.gov/fuels/altfuels/e85/annuale85vol_chart.xlsx .



The single column to the right of the chart showing 50 million gallons of E85 volume in California for 2021 is an estimate of 2021 E85 volume based on the dramatic demand expansion of 5% per month that Pearson Fuels has tracked during the first four months of 2021. The primary driver for this growth has been the spike in gasoline prices that California has experienced this year. This illustrates another substantial benefit of E85: fuel diversification.

The primary reason E85 use is on the rise in California is a typical and crucial driver in the fuel market, price. Retail pricing data that Pearson Fuels purchased from the Oil Price Information Service ("OPIS") for the past two years shows that E85 has ranged from $0.75-$1.50/gallon cheaper than regular unleaded gasoline at the pump in Los Angeles county.[8] Due to this large and consistent price discount, even after discounting for E85's lesser energy content, E85 saves FFVs drivers an average of approximately $0.15 per gallon at the pump compared to gasoline- a massive discount in the retail fuels business.

FFVs using E85 can Immediately Decrease GHG Emissions from California TNCs.
FFVs are certified by EPA and CARB to utilize blends of ethanol and gasoline that range from 0-85% ethanol. Based on California vehicle registration data, there were 1.3 million FFVs registered in the state in 2018, and the vehicles make up about 5% of California's passenger vehicles. The CMS Base Year Inventory Report for 2018 ("Inventory Report") estimates that there are 642,000 TNC vehicles amidst the California passenger vehicle population of 25.6 million. Unfortunately, it does not appear that CARB's inventory analysis extended to determining how many FFVs already exist in the TNC fleet. However, assuming proportionate

[8] This is based on proprietary fuels pricing data over a 27-month period in Lost Angeles County purchased from the Oil Price Information Service (OPIS). The data cannot be publicly released but can be replicated or potentially shared with CARB as confidential business information.

FFV representation of 5%, there are about 32,000 TNC FFVs in operation. Referring to Table 10 of the Inventory Report, this indicates that there are about five times as many TNC FFVs as TNC plug-in hybrid electric vehicles ("PHEVs"), and about 10 times as many TNC FFVs as TNC battery electric vehicles ("BEVs").[9]

In a situation that is somewhat analogous to PHEVs that can run on gasoline or electricity, FFVs provide substantial opportunities to reduce GHG emissions but only when the vehicles are fueled with E85. The carbon intensity of E85 in California is well-established by the Low Carbon Fuel Standard ("LCFS") program that tracks and reports the carbon intensity of all ethanol sales. Based on LCFS program data, the 2019 average carbon intensity ("CI") for ethanol consumed in California was 62 g CO_2e/MJ.[10] This compares very favorably with the average CI of gasoline which CARB has determined to be 100.82g CO_2e/MJ.[11] The average actual blend of ethanol and gasoline at California retail stations that sell E85 is 83% ethanol and 17% gasoline.[12] Based on the CI and ratio of these fuels, an FFV consuming E85 (more precisely E83) is utilizing a sufficient amount of low carbon ethanol that its GHG emissions based on fuel alone are reduced by 32% compared to gasoline on a lifecycle basis. In addition, FFVs utilizing E85 typically emit between 5-15% less tailpipe CO_2 emissions. Thus a TNC FFV operating on E85 will typically provide a net reduction of 42% GHG reductions compared to that same model running on gasoline. However, due to the significant variability between vehicle models in the level of tailpipe CO_2 emission reductions, this comment proposes that only the GHG reductions achieved by the reduction of lifecycle emissions be recognized in the CMS program. This conservative approach is proposed to avoid the complexity of CARB having to calculate tailpipe GHG emissions based on the performance of individual FFV models.

Within the proposed CMS regulatory structure, the levels of GHG reduction achieved by fuels and vehicles compared to gasoline are recognized by Table 2, "CO_2 factors for the passenger car (PC) vehicle category in g CO_2/mile." For instance, for the year 2018, the HEV/PHEV CO_2 factor was approximately 50% of the gasoline CO_2 factor thus recognizing the GHG reductions achieved by these vehicles. However, in contrast to the recognition of GHG reductions delivered by the PHEVs, BEVs, and fuel cell electric vehicles ("FCEVs"), the Proposed CMS does not recognize the GHG reduction benefits provided to California by TNC FFVs. This lack of recognition occurs because §2490.1(c)(4)(ii) provides, "Flex fuel vehicles (FFVs) shall use the gasoline passenger car (PC) or gasoline light truck (LT) CO_2 emission factor values."

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[9] Estimates of the various types of vehicles are included in Table 10 of the Base Year Inventory Report and California FFV registration data. The Report references an IHS Markit database of VIN numbers with vehicle identifiers. The VIN numbers also identify FFVs and so could also be used to obtain a more accurate count of FFVs currently in the TNC fleet.

[10] See "Low Carbon Fuel Standard Data Dashboard" 2019 Volume-weighted Average Carbon Intensity by Fuel Type for Liquid Fuels (Figure 5) at https://ww3.arb.ca.gov/fuels/lcfs/dashboard/dashboard.htm The LCFS

[11] LCFS Lookup Table for Gasoline (Table 7-1) establishes the average CI value of California gasoline as 100.82.

[12] Under California state law, E85 Fuel Ethanol consists of a minimum of 79% ethanol, a maximum of 2% of other alcohols, and a range of 15-21% of hydrocarbons and aliphatic ethers. 13 CCR §2292.4. Due to the incentives available for ethanol under the LCFS and federal Renewable Fuel Standard programs coupled with the relative pricing of ethanol to gasoline in the market, ethanol is blended at its highest allowable content in the retail market.

Such an approach misses the opportunity to harness California's existing FFV fleet to deliver GHG reductions and cost-savings. Not only does using E85 in FFVs reduce GHG emissions, it also saves drivers money and achieves petroleum reduction.

In addition to the lesser number of PHEVs and BEVs in the TNC fleet, it is important for CARB to recognize in CMS policy design that PHEVs and BEVs at this stage of technology development fall heavily into the subcompact and compact vehicle sectors **with no existing BEVs yet viable to transport a driver plus four or more passengers at a time**. By contrast, **FFV models on the road today in California include extended vehicles and passenger vans including the Chevrolet Express, Suburban and Tahoe; the Dodge Grand Caravan and Durango; the Ford Transit 150/250/350; the GMC Yukon; and the Nissan Armada**. The use of E85 in these FFVs provides an immediate opportunity to reduce passenger miles by pooling rides and using a low carbon fuel simultaneously.

Expanding the Use of Very Low Carbon Fuels Is Essential to a diversified Deep Decarbonization Strategy.

Rather than undercutting CARB's heavy reliance on the electrification of the light-duty fleet, the inclusion of an FFV/E85 component in the CMS program will accelerate GHG reductions, complement electrification by providing immediate GHG reductions in the 2020's, and reduce costs. The US Department of Energy's Transportation Energy Futures ("TEF") project analyzed opportunities for deep decarbonization and emphasized the importance of including advanced biofuels into aggressive decarbonization strategies. As described by the National Renewable Energy Laboratory, the TEF report found that:

> *"Increased use of certain biofuels pathways could play a pivotal role in reducing GHG emissions and reaching the CTSI (Clean Transportation Section Initiative) goal of an 80%–100% reduction by 2050. In the TEF scenario, biofuels were a key component to reducing petroleum use and GHGs. For example, in TEF's 80% carbon-reduction scenario by approximately 2050, advanced biofuels contributed around 70 billion gallons to the fuel mix in 2050. With lifecycle emissions approximately 70 to 80% lower than gasoline (dependent on the specific feedstock and pathways), this could displace approximately 510 to 620 MMT of GHG emissions per year by 2050.*[13]

Fuel switching FFVs from gasoline to E85 while saving drivers money and preserving service to low-income communities is a simple and prudent GHG-reduction strategy. This strategy can be further enhanced by the expansion of the use of very low carbon fuels- another strategy being pursued by Pearson Fuels. Rather than utilizing standard ethanol and gasoline for its E85, Pearson Fuels is already blending cellulosic ethanol with naphtha. There are currently 40 LCFS pathways for ethanol produced from corn fiber that provide CI reductions of 54-79% compared to gasoline with a midpoint of a 66% reduction. Pearson couples this with a renewable naphtha that provides an 80% reduction in an E83 cellulosic ethanol/renewable naptha blend resulting in

[13] National Renewable Energy Laboratory, "Transformative Reduction of Transportation Greenhouse Gas Emissions: Opportunities for Change in Technologies and Systems," (last reviewed April 26, 2021), at https://www.nrel.gov/docs/fy15osti/62943.pdf, at p. 25.

an overall GHG reduction of approximately 68%. By providing more than a 60% CI reduction, this fuel blend meets the standard of "very low carbon fuel" established by California Health and Safety Code §43870(b). As stated in the legislative findings of the bill that established the standard, "Low-carbon transportation fuels are an important element of the state's greenhouse gas reduction policy, and increasing the supply of those fuels will help the state achieve its greenhouse gas reduction goals."[14]

As previously stated, the Proposed CMS Regulation fails to fulfill CARB's rulemaking obligations as established by multiple California GHG statutes and administrative law requirements due to the omission of an FFV/E85 component:

- CARB must achieve the maximum degree of GHG reduction from mobile sources. California Health & Safety §38560
- CARB must evaluate regulatory alternatives and find that there is no alternative proposal that is less burdensome and equally effective. California Government Code §11346.2(b)(4)
- CARB must assess impacts on low impact communities, particularly in an industry where 56% of the drivers reside in disadvantaged communities.[15] California Health & Safety Code §38562(b)(2)
- CARB and the PUC must ensure minimal negative impact on low- and medium- income drivers and can delay the program to achieve this. SB 1014

The remainder of this comment describes the relatively modest changes to the Proposed CMS Regulation that could be used to provide crediting for GHG reductions achieved by E85 usage to FFVs in TNC fleets. The attached Exhibit B provides specific exemplary language to establish a well-tailored FFV/E85 component as part of the CMS program.

Recommended Approach to Recognizing GHG Reductions from FFVs

The recognition and crediting of GHG reductions obtained by the use of E85 in FFVs can be done with minimal change to the Proposed CMS Regulation and no dilution of the rapid expansion of zero electric vehicles ("ZEVs") or the other objectives of the CMS program. The treatment of gasoline vehicles would remain unchanged, and a relatively high use threshold would be set for opt-in crediting by FFVs. The ease of integrating FFVs utilizing E85 is greatly facilitated by the robust system of fuel cards that has already been developed for supervising and controlling the fueling of fleet vehicles.

Forbes Advisor has developed this summary of fleet fuel cards:

[14] AB-692 Low-carbon transportation fuels. (2015-2016), at https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=201520160AB692&showamends=false.
[15] CARB, "Staff Report: Initial Statement of Reasons," March 30, 2021 ("ISOR"), at p. 93 the ISOR states, "From the ZIP codes in the 2018 TNC dataset, CARB staff found that approximately 56% of TNC drivers could potentially be from low-income or disadvantaged communities as defined pursuant to SB 535 and AB 1550."

> *A fleet card, or also referred to as a fuel card, is a payment card that can be used for fuel at gas stations along with some vehicle maintenance costs. Most function similarly to a charge card. Fleet cards can often provide comprehensive reports that are available in real-time which allows fleet owners to have critical information at their fingertips.*
>
> *Fleets cards are commonly issued by either an oil-brand company, such as Shell, or companies that specialize in providing cards, such as WEX.*
>
> *The two major benefits of fuel cards are the savings at the pump, or wholesale pricing, and the ease of obtaining reports related to the card's usage in real-time. These cards also allow limits to be set on employee cards such as the amount of fuel that can be purchased per transaction, per day and per week, giving the card owner full control on how the card can and can't be used.*[16]

In order to opt into FFV crediting, a TNC would be required to integrate a qualified flex fuel vehicle ("QFFV") reporting plan into its Biennial Compliance Plan that is the "forward-looking plan that shall describe the TNC's plan to comply with targets in the subsequent two years."[17] It is anticipated that all participating fleets would determine the number of FFVs in their fleets, identify TNC drivers who are willing to participate, and utilize some type of fleet card that can be used at E85 stations to gain the extensive reporting and record-keeping capabilities of these cards.

As previously mentioned, it is reasonable for CARB to impose a significant minimum threshold of E85 use and other requirements for participation in the program. It is recommended that the minimum usage rate be set at 50% or higher such that FFVs are being primarily fueled by E85 in order to enable credit generation. It is also recommended that a minimum number of QFFVs be enrolled in the program in order for a TNC to opt into the program. It is suggested that this be set relatively low at 20 vehicles as the minimum QFFV fleet as it is anticipated that participation in this program is likely to be popular among the smaller TNC companies. Vehicles manufactured by OEMs as FFVs, and vehicles converted to enable E85 usage with CARB approved and certified aftermarket conversion kits would be authorized to participate in QFFV programs. CARB would have significant discretion in determining the requirements attaching to participation and reporting for the QFFV program.

Exemplary regulatory language to integrate FFVs that utilize substantial quantities of E85 to reduce GHG emissions into the CMS Regulation is included in Exhibit B. Of course, there are alternative approaches that CARB could utilize to enable the crediting of TNC FFVs that utilize substantial amounts of E85 fuel under the CMS program. Pearson Fuels is supportive of any method that CARB develops that enables E85/FFV crediting; the crucial objective of this comment is to ensure that this GHG reduction opportunity is integrated into the CMS program.

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[16] Forbes Advisor, "Forbes Advisor Guide to Fleet Fuel Cards, at https://www.forbes.com/advisor/credit-cards/forbes-advisor-guide-to-fleet-fuel-cards/ (last viewed April 25, 2021).
[17] Proposed CMS Regulation Order, at Title 13, §2490.3(b)(1).

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Conclusion

The integration of FFVs that utilize low carbon E85 fuel into the Clean Miles Standard would diversify and strengthen the program, protect low- and middle-income drivers and passengers from negative economic and mobility impacts, and speed the pace of GHG reduction; while at the same time reducing costs and petroleum consumption. It would improve the cost-effectiveness of the program without sacrificing any of the CMS program's objectives. We therefore request that CARB develop an FFV/E85 crediting mechanism as part of the CMS program development consistent with the legislative authority cited in this comment.

Pearson Fuels appreciates this opportunity to provide comment into the rulemaking process. We are available for further discussions or to provide further input upon request.

Sincerely,

Doug Vind
Managing Member
RTC Fuels, LLC dba Pearson Fuels

Exhibit A
E85 Sales Growth in California

YEAR	Total Volume (Million Gallons)	Annual Growth
2006	8,000	
2007	155,847	
2008	770,983	
2009	1,643,497	
2010	2,930,034	
2011	5,024,329	
2012	6,482,868	
2013	8,799,981	36%
2014	11,066,428	26%
2015	14,773,124	33%
2016	18,679,904	26%
2017	23,854,146	28%
2018	33,774,239	42%
2019	40,602,796	20%
2020	40,372,564	-1%

Exhibit B

Proposed Regulation Order with Recommended Changes to Implement FFV Crediting Marked

(Author Notes in Parentheses and Highlighted for Clarity)

Adopt new sections 2490, 2490.1, 2490.2, 2490.3, 2490.4, and 2490.5 in new Chapter 11 of Division 3, Title 13, California Code of Regulations, to read as follows:

[Note: The sections set forth below are new sections proposed in this rulemaking. Therefore, for simplicity, the language in those sections is shown in "normal type"]

§ 2490. Clean Miles Standard Regulations Applicability and Scope.

(a) Applicability and Exemptions

(1) (No Changes Recommended)

(b) Definitions

(Add or Modify only these Definitions):

"E85 use program" means a program established by a TNC to maximize the use of E85 in flex fuel vehicles.

"Flex fuel vehicle" means a vehicle certified by CARB to run a blend of gasoline and ethanol up to a maximum of 85% ethanol "(E85)", and includes both flex fuel vehicles manufactured by original equipment manufacturers and vehicles that have been converted to flex fuel vehicles using conversion kits certified by CARB.

"Qualified flex fuel vehicle" or "QFFV" means a flex fuel vehicle that has been determined by CARB to have qualified for participation in an E85 use program.

§ 2490.1 Clean Miles Standard Requirements.

a) (No Changes Recommended)

b) *Definitions*. The following definitions apply to this section:

(No Changes Recommended)

c) Greenhouse Gas Targets.

(No changes Recommended to §2490.1(c)(1-3))

(Change recommended to §2490.1(c)(4)):

(4) *Tables 2 and 3 - CO_2 Emission Factor Look-up Table*. For each TNC trip calculated using Equation 1, the CO_2 factor shall be set to the value in grams CO_2 per mile (g CO_2/mi) in Table 2 and Table 3 that corresponds to the vehicle model year, vehicle category, and vehicle propulsion system for the associated TNC vehicle.

(i) If any of the parameters are not known for a TNC vehicle, the worst-case (largest) grams CO_2/mi value shall be used. For example, if only the vehicle model year is known but not the vehicle propulsion system or vehicle category, the largest value for that model year shall be used. If vehicle propulsion system is known but not the vehicle model year, the largest value for that vehicle propulsion system shall be used.

(ii) Flex fuel vehicles (FFVs) shall use the gasoline passenger car (PC) or gasoline light truck (LT) CO_2 emission factor values, unless the FFV has enrolled in a E85 use program approved by CARB and is therefore classified as a qualifying flex fuel vehicle (QFFV).

(iii) Qualifying flex fuel vehicles (QFFVs) shall use the gasoline passenger car (PC) or gasoline light truck (LT) CO_2 emission factor values for all passenger miles traveled (PMT) using gasoline. For passenger miles traveled using E85, QFFVs shall use the gasoline passenger car (PC) or gasoline light truck (LT) CO_2 emission factor discounted by the E85 GHG reduction value calculated by CARB for the applicable year based on the weighted average carbon intensity of ethanol as reported into the Low Carbon Fuel Standard.

~~(ii)~~

~~(iii)~~(iv) The light truck vehicle category (Table 3) shall be used if the TNC vehicle is classified as a light-duty truck and has a gross vehicle weight rating (GVWR) of less than 8,500 lbs. and an estimated total weight (ETW) of less than 5,750 lbs.

~~(iv)~~(v) All TNC vehicles that do not fall into the light truck vehicle categoryshall use the passenger car category (Table 2).

~~(v)~~(vi) Model year means the model year of the vehicle as reported by the TNC driver in their driver profile. If this information is not complete, it is the value as determined by the TNC or regulating agencies using the vehicle identification number (VIN).

(No further changes recommended to §2490.1.)

§ 2490.2 Optional Credits

(No changes recommended).

§ 2490.3 Compliance and Reporting

(Changes recommended to 2490.3(b)(3)):

(3) The Biennial Compliance Plan shall summarize strategies with which the TNC will meet the electrification and GHG targets, including how they will reduce deadhead miles and increase passenger occupancy. The Biennial Compliance Plan shall include, at a minimum:

Two-year projected:

i. Annual fleet population (number of vehicles)
ii. Annual fleet average GHG emissions in g CO_2/mi
iii. Annual average vehicle occupancy
iv. Strategies for increasing average vehicle occupancy
v. P1 + P2 proportion of total VMT (deadhead miles)
vi. Strategies for decreasing proportion of deadhead miles
vii. Total annual VMT
viii. Grams CO_2/PMT
ix. BEV and FCEV proportion of fleet population
x. Any proposed QFFV Plan and expectations for the QFFV Plan
~~x.~~xi. Percent eVMT

(Changes recommended to §2490.3(c)(6)):

(c) Annual Compliance Report.

(6) In the Annual Compliance Report that summarizes each reporting period, the TNC shall report:

~~xi.~~xii. Total fleetwide vehicle population
~~xii.~~xiii. Total fleetwide GHG (grams CO_2)
~~xiii.~~xiv. Total fleetwide VMT
~~xiv.~~xv. Average compliance occupancy
~~xv.~~xvi. Average actual vehicle occupancy (based on real data or survey)
~~xvi.~~xvii. Total compliance of GHG target (grams CO_2/PMT)
~~xvii.~~xviii. Number of BEVs and FCEVs in fleet population
~~xviii.~~xix. Number of PHEVs in fleet population
xx. Number of HEVs in fleet population
~~xix.~~xxi. Number of QFFVs in fleet population
~~xx.~~xxii. Total compliance % eVMT
~~xxi.~~xxiii. CO_2 credits being requested and from which credit option