NOYES LAW
CORPORATION
FUEL & CARBON LAW

April 27, 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 joshua.cunningham@arb.ca.gov, alexander.mitchell@arb.ca.gov, and tuomo@steponetech.com)

RE: Proposed Clean Miles Standard

Dear Chair Randolph,

We appreciate the opportunity to provide comments regarding the California Air Resources Board's ("CARB") Proposed Clean Miles Standard ("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"). This regulatory recommendation will enhance the Proposed CMS by providing a GHG reduction strategy that utilizes existing alternative fuel vehicles, can be immediately implemented to lower GHG emissions from approximately 5% of the Transportation Network Company ("TNC") fleet, can be further expanded to convert a wide range of vehicles into FFVs, and will save TNC drivers money at the pump.

StepOne Tech America Inc. ("StepOne") is the world's leading developer of eFlexFuel, an integrated technology that converts gasoline, hybrid and plug-in hybrid (PHEV) vehicles into FFVs. StepOne's technology has converted over 25,000 vehicles in Europe into FFVs and is compatible with over 60% of the passenger vehicle fleet in California. The company has been developing the technology now for close to a decade with a low emissions first strategy. StepOne operates under strict quality standards. To ensure that the emissions, safety and durability of the converted vehicles are not compromised in any way, StepOne only supplies technology to vehicles that are verified as fully compatible with the company's eFlexFuel conversion technology and E85 fuel. Vehicles equipped with eFlexFuel have been certified pursuant to the strictest emission standards in Europe, contributing to EU's emission reduction efforts. StepOne fully supports the greenhouse gas ("GHG") reductions required by the California Global Warming Solutions Act of 2006 ("SB 32"), and the Air Resources Board's portfolio of programs in the transportation sector to achieve these reductions. StepOne is pursuing a CARB

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certification for its technology by conducting required emission testing and fulfilling other regulatory requirements.

FFVs that utilize E85 represent the most proven, cost-effective and immediately available GHG reduction strategy available for California's TNC fleet. As discussed further in this comment, there are far more existing FFVs in the current TNC fleet than any other type of alternative fuel vehicle. In addition, E85 is widely available in California's metropolitan areas with over 260 retail stations currently operating in the state. And, most importantly from a practical standpoint, FFVs cost the same as gasoline vehicles and E85 consistently saves FFV drivers on a cost per mile basis. FFV GHG reductions represent the cheapest and quickest reductions because there is no need to recover the cost of a premium vehicle. As a result, existing TNC FFVs using E85 can start reducing GHG emissions from TNC vehicles tomorrow. All that is necessary is a policy signal from the CMS regulation. This policy signal can be purely additional to the Proposed CMS regulation. More precisely, implementing the FFV/E85 strategy proposed by this comment would enable California:

- To achieve GHG reductions from the CMS at a lower cost per metric ton of CO_2e
- To begin achieving those GHG reductions immediately
- To reduce fuel costs for TNC drivers with FFVs
- To maintain intact and without dilution all of the other components of the Proposed CMS including the ZEV requirements
- To reduce the likelihood of unintended financial consequences of the CMS on low- and middle-income drivers

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 deliver GHG reductions to California more quickly and cost-effectively. The following statutory authority supports the inclusion of an FFV crediting provision in the TNC with key language underlined for emphasis:

- California Health & Safety §38560 (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 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."
- 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."

- 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."

If recognized by the CMS Program, 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 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").

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.[1] This compares very favorably with the average CI of gasoline which CARB has determined to be 100.82g CO_2e/MJ.[2] The average actual blend of ethanol and gasoline at California retail stations that sell E85 is 83% ethanol and 17% gasoline.[3] 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

[1] 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
[2] LCFS Lookup Table for Gasoline (Table 7-1) establishes the average CI value of California gasoline as 100.82.
[3] 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.

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.

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.

In contrast to the recognition of GHG reductions delivered by the PHEVs, BEVs, and fuel cell electric vehicles ("FCEVs"), the Proposed Regulation 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."

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. Retail pricing data obtained 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.[4] Due to this large and consistent price discount, even after discounting for E85's lesser energy content, E85 saves FFVs drivers about \$0.15 per gallon at the pump compared to gasoline- a massive discount in the retail fuels business. In addition, the size of the FFV fleet is considerably more substantial than any of the other alternative fuel vehicle types. Currently, there are almost three times as many TNC FFVs as the collective total of PHEVs, BEVs, and FCEVs in the TNC fleet.[5]

In addition to the lesser number of PHEVs and BEVs in the TNC fleet, 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, during the peak of FFV manufacturing that occurred from 2013-2015, FFV models included 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.

Further enhancing the decarbonization opportunities is the development and deployment of waste to ethanol and cellulosic ethanol. These efforts are well-advanced in Finland where the St1 Biofuels' Etanolix™ plant refines biodegradable food industry waste and process residues into advanced ethanol. In addition to using food waste as a feedstock, the Etanolix™ plant

[4] 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.

[5] 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.

harnesses renewable power for process energy thereby achieving up to a 90% reduction of lifecyle GHG emissions.[6] 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.*[7]

The omission of this extremely valuable GHG reduction and cost-savings strategy from the Clean Miles Standard is the crucial issue that this comment requests that CARB address. Without an FFV/E85 component, the Proposed CMS Regulation fails to fulfill CARB's rulemaking obligations as established by multiple California GHG statutes and administrative law requirements:

- 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. 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

StepOne and other FFV conversion technology companies have proven in Europe that GHG and petroleum reduction can be achieved not only through leveraging existing FFVs manufactured by original equipment manufacturers ("OEMs") but also through the deployment of conversion technologies in conventional gasoline vehicles. In 2018, the European Commission revised the Renewable Energy Directive (RED II). RED II establishes requirements for renewable fuel usage in transportation: member states must require fuel suppliers to supply a minimum of 14% of the energy consumed in road and rail transport by 2030 as renewable fuel. By supporting the eFlexFuel technology, France has led the way in expanding E85 usage and is already showing results. The sale of fossil fuels went down 13.7% in 2020 whereas sales of E85 increased 4%.

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[6] St1 website, "Advanced fuels from waste," at https://www.st1.com/about-st1/company-information/areas-operations/advanced-fuels-waste (last viewed April 26, 2021).

[7] 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.

The market share of E85's total fuel sales into on-road transportation increased from 1.7% in 2018 to 3.6% in 2020.[8]

The remainder of this comment examines these issues in additional detail. It first examines the dramatic expansion of the use of E85 in California which demonstrates that E85 is a proven GHG reduction strategy. The following section 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.

The Usage of E85 in California FFVs is a Proven GHG Reduction Strategy

The state of California has consistently collected E85 usage data since the early days of American FFV manufacturing in 2006. As a result, CARB has developed fourteen years of highly reliable data regarding the amount of E85 used in FFVs registered in the state and has provided a letter confirming this data that is included as Exhibit A to this comment.[9]

In terms of process, CARB requires a distinct review and certification process for dual-fueled vehicles that utilize E85. Vehicles that are certified for E85 use are tracked within the California Department of Motor Vehicle (DMV) registration process such that the number of FFV vehicles registered can be determined for any particular year. In addition, California tracks E85 fuel sales utilizing a memorandum of exemption (MOE) approach.[10] The MOE approach was established to facilitate enforcement of the California specification for E85, found at title 13 of the California Code of Regulations at Section 2292.4. All E85 fuel suppliers are required to report all E85 blending that occurs in California via reports that are filed with CARB. Only E85 blended by these authorized fuel suppliers is legal for sale in California.

CARB has utilized an E85 data gathering system for the period 2006-2020 and has developed fifteen years of highly reliable empirical data. Based on California vehicle registration data, there were approximately 1.2M FFVs registered in the state in 2016, 1.23M FFVs registered in 2017, 1.3M FFVs registered in 2018, and 1.4M registered in 2019.

Regarding E85 use in FFVs, CARB Manager Alexander "Lex" Mitchell who leads the Emerging Technology Section of the Industrial Strategies Division recently reported by letter dated March 19, 2021,[11] the following "E85 Demand" data collected by CARB regarding E85 usage in California over the years 2006-2019. In 2020, for the first time in 15 years, there was a slight

[8] French Ethanol Producers Association statistics (last reviewed April 26, 2021), at Le bioéthanol conforté, malgré le confinement - Bioethanolcarburant, at https://www.bioethanolcarburant.com/actualite/le-bioethanol-conforte-malgre-le-confinement/

[9] Letter of Alexander "Lex" Mitchell, Manager of Emerging Technology Sector, Industrial Strategies Division, California Air Resources Board to Graham Noyes, dated October 22, 2020, and provided as Exhibit A to this comment.

[10] 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.

[11] Letter of Alexander "Lex" Mitchell, Manager of Emerging Technology Sector, Industrial Strategies Division, California Air Resources Board to Graham Noyes, dated October 22, 2020, and provided as Exhibit A to this comment.

decline of less than 1% in E85 in 2020 with 40,372,564 gallons of E85 sales reported. However, this flat E85 demand curve compared very favorably to the dramatic drop in gasoline demand of approximately 20% associated with COVID. The Year-on-Year Growth column has been calculated based on the figures provided by CARB.

Year	E85 Demand	Year on Year Growth
2006	8,000	N/A
2007	155,847	1848%
2008	770,983	395%
2009	1,643,497	113%
2010	2,930,034	78%
2011	5,024,329	71%
2012	6,482,868	29%
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	-0.5%

Mr. Mitchell provided the following information regarding the manner in which CARB developed the E85 data:

> *As you are aware, the State of California tracks E85 fuel volumes reported under the E85 program found in Title 13, California Code of Regulations, section 2292.4. Fuel suppliers are required to report E85 volumes in California via reports that are filed with the California Air Resources Board. E85 blended by these authorized fuel suppliers is legal for sale in California for use in flexible fuel vehicles and represents virtually all the E85 sold in the State.*

Mr. Mitchell further stated that, "My staff has reviewed these numbers and they are accurate to the best of our knowledge." For the complete letter, please review Exhibit A attached.

In terms of supply, E85 is supplied to consumers through a rapidly growing network of retail E85 stations. Pearson Fuels is the largest distributor of E85 in California. The company supplies 205 retail E85 stations[12] under long term contract and anticipates continuing to expand its station network by about 50 stations per year for the next two years. Propel Fuels is the second largest E85 supplier in California with 33 locations.[13] Phillips66 is the first petroleum major to supply E85 via its retail station network, and currently has 9 retail locations in the Los Angeles area.[14]

[12] Pearson Fuels' Website, at https://pearsonfuels.com/e85-gas-stations/ (last viewed October 21, 2020).
[13] Propel Fuels' Website ("Locations"), at https://propelfuels.com/locations (last viewed October 21, 2020).
[14] Phillips 66's website at https://www.76.com/station-finder?a=e85 (last viewed October 21, 2020.)

There are 13 other non-affiliated retail stations, as well as 46 non-public government E85 sites in California. This results in a total E85 retail station count of 260.

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:

> *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.*[15]

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."[16] 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 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

[15] 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).
[16] Proposed CMS Regulation Order, at Title 13, §2490.3(b)(1).

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 in these programs.

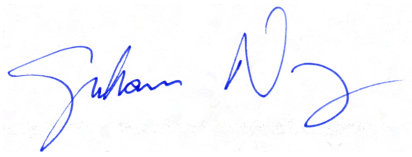
Exemplary regulatory language to integrate FFVs that utilize substantial quantities of E85 to reduce GHG emissions into the CMS Regulation is included in Exhibit B. Of course, there are alternative approaches that CARB could utilize to enable the crediting of TNC FFVs that utilize substantial amounts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

Conclusion

The integration of FFVs that regularly 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.

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

Sincerely,



Graham Noyes

EXHIBIT A

CALIFORNIA
AIR RESOURCES BOARD

March 19, 2021

Mr. Graham Noyes
Noyes Law Corporation
401 Spring Street, Suite 205
Nevada City, CA 95959
graham@noyeslawcorp.com

Dear Mr. Noyes:

Thank you for your inquiry regarding the amount of E85 sold in California for transportation fuel purposes. As you are aware, the State of California tracks E85 fuel volumes reported under the E85 program found in Title 13, California Code of Regulations, section 2292.4. Fuel suppliers are required to report E85 volumes in California via reports that are filed with the California Air Resources Board. E85 blended by these authorized fuel suppliers is legal for sale in California for use in flexible fuel vehicles and represents virtually all the E85 sold in the State.

Year	Gallons	Year	Gallons
2006	8,000	2014	11,066,428
2007	155,847	2015	14,773,124
2008	770,983	2016	18,679,904
2009	1,643,497	2017	23,854,146
2010	2,930,034	2018	33,774,239
2011	5,024,329	2019	40,602,796
2012	6,482,868	2020	40,372,564
2013	8,799,981		

The number of E85 stations has increased from 130 in 2018 to 685 today.

My staff has reviewed these numbers and they are accurate to the best of our knowledge.

Sincerely,

Alexander "Lex" Mitchell, Manager
Emerging Fuels Section
Industrial Strategies Division

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