Catherine H. Reheis-Boyd
President and CEO

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Sent via e-mail and upload to: https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=lcfs-wkshp-dec21-ws%20&comm_period=1

Ms. Rajinder Sahota
Deputy Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: WSPA Comments on CARB Workshop: Potential Future Changes to the LCFS Program

Dear Rajinder,

Western States Petroleum Association (WSPA) appreciates the opportunity to comment regarding the Low Carbon Fuel Standard (LCFS) Public Workshop: Potential Future Changes to the LCFS Program, held on December 7, 2021. WSPA is a trade association that represents companies that provide diverse sources of transportation energy throughout the west, including California. This includes the transport and marketing of petroleum, petroleum products, natural gas, renewable fuels, and other energy supplies.

Provided in this letter are comments pursuant to the CARB staff presentation during the December 7th LCFS Workshop. WSPA and its member companies look forward to subsequent stakeholder engagement with CARB in 2022 on the concepts identified on December 7th. We encourage CARB to begin scheduling workshops focused on individual subject areas as soon as possible in the new year. WSPA suggests individual workshops be scheduled to address the key LCFS program elements including but not limited to:

- Role of Credit Generating Projects
- Fuel Supply Scenarios for Pre- and Post-2030 Carbon Intensity Targets
- Assessment of Potential LCFS Program Streamlining & Exportability

Slide 10: Future Rulemaking Potentially Taking Effect in 2024

WSPA supports the concept of a 2024 effective date for LCFS regulation amendments. This allows for a full and comprehensive public rulemaking process and gives the regulated community the necessary lead time to prepared for new compliance requirements.

Slide 12: Potentially Strengthen Interim Pre-2030 Targets

An essential element in the success of the LCFS program is regulatory certainty. The idea of changing established carbon intensity (CI) targets that have been subject to substantial rulemaking processes in the recent past needs careful evaluation. Since its inception, the LCFS program has gone through several amendments (i.e., in 2018, CARB both reduced its near term stringency and extended the program into 2030) and provided the regulated community clear communication of California's goals.

If CARB chooses to proceed with the proposed concept at this point in the LCFS program, any

modifications of the CI targets need to be fully evaluated in a manner consistent with past LCFS program amendments with regard to research, analysis, and stakeholder review. Discussions of potential compliance curves going forward are especially critical as CARB staff shares for the first time the technical/regulatory basis for potential post-2030 compliance targets and illustrative scenarios for achieving them.

Slide 12: Book-and-Claim for Low CI Hydrogen

Hydrogen can be produced without the use of fossil fuels. However, the cost of alternative production technologies is still above the cost of reformation of methane from natural gas, which is the most ubiquitous production technology. Allowing for book-and-claim accounting of new-or-expanded low-CI hydrogen injected into hydrogen pipelines will allow alternative forms of hydrogen production to compete in the market without the hinderance of tracking hydrogen molecules along the value chain or restricting transportation modes to those that can accept single-origin molecules. WSPA supports CARB's proposal to add this flexibility.

Slide 12: Expanding Hydrogen Refueling Infrastructure Program

WSPA has always maintained fuel neutrality must be a principle the LCFS incorporates. A program such as the LCFS relies on technologies that today may not be cost effective and understands the desire for CARB to provide an incentive for the infrastructure to be built. This is because technologies which can deliver low CI fuels will require significant scaling to meet the program's goals. CARB's concepts of including capacity credits for heavy duty vehicles should be weighed against what value they will likely deliver in the long run. WSPA believes that employing a fuel neutral approach to capacity credits and providing an opportunity for all types of infrastructure that contributes to the states goals is key.

Slide 13: Limit and Ultimately Phase Out Credit Generation for Petroleum Projects

While California has clear goals to reduce or eliminate the use of fossil fuels in transportation, these fuels will be in use for many years. CARB should use the LCFS program to continue to encourage refiners and crude producers to lower the carbon intensity of their operations. It is important to note California's LCFS is directly connected to future accelerated and successful deployment of many low carbon solutions that contributes to the broad decarbonization of the California economy.

Regarding the potential phase out of petroleum-related credits, CARB staff indicated that this refers to project-related credits, which could presumably include Carbon Capture, Utilization, and Sequestration (CCUS), Innovative Crude and the Refinery Investment Credit Program (RICP). This is the wrong direction to take with these provisions.

CCUS will play a critical role in California reaching its climate goals. Governor Newsom's recent California's Electricity System of the Future report highlighted the key role that CCUS can play in state climate action. California industries possess and have exhibited a depth of technological capability and technical expertise to quickly and safely deploy CCUS.

With regards to other innovative technologies, LCFS paves the way for decarbonization of industrial processes (e.g., industrial deployment of solar power in conjunction with battery storage or as generated, and solar steam) which could then be applied to other industries in California and around the globe (e.g., cement, mining, chemicals, steel). Thus, support for Innovative Crude and RICP is support for innovation and California leadership in climate technology. If anything, Innovative Crude and RICP should be expanded to include more technologies that would not only lead to further

innovation and technological leadership but could also lead to early development and broad deployment of clean technology industries and ecosystems in California. To date, CARB has already approved six (6) Innovative Crude applications and three (3) RICP applications. Combined, these projects are estimated to deliver more than 200,000 metric tons of CO_2e reduction each year. This is demonstrable carbon reduction that is enabled by the Innovative Crude and RICP provisions of the LCFS.

WSPA strongly supports CARB looking for opportunities to expand provisions related to CCUS, Innovative Crude, and RICP. not reduce or eliminate them. We look forward to discussing opportunities for expansion as this rulemaking progresses.

Slide 13: Deficits for Jet Fuel

The concept of adding deficits for intrastate fossil jet fuel use is an extremely complicated proposal. Refiners producing jet fuel in California will have no information related to the end use of the product when it is shipped from the refinery. Even when this product is delivered directly from a refinery to an airport, the refiner will not know what volume is used in intrastate, interstate, or international flights. This would mean making the airlines themselves the first regulated party for fossil jet fuel, creating a burdensome feedback process to convey this information to fuel suppliers, or transferring obligation to the airlines and creating an equally burdensome process for them to report non-intrastate volumes in order to cancel those deficits.

Whatever approach might be adopted for compliance reporting, this new requirement would mean significant changes to contracts between refineries, fuel suppliers, and airline customers and potential bifurcation of the jet fuel supply chain. It is also unclear how one would account for fuel loaded to an aircraft in California that then flies to another airport in California and then out of state, without having consumed all of the initial load of fuel. Applying deficits to the total volume of fuel loaded at the first airport would mean applying an LCFS obligation to fuel not used in California. Even without the complexity that this proposal would introduce, WSPA believes that this action is not necessary. Airlines are increasingly demanding alternative jet fuel supplies today to meet their own carbon reduction goals and refiners and other fuel suppliers are working to meet that demand. LCFS credits help to enable this growth.

Slide 15: Changes in Technology and Data

WSPA supports advancing science-based improvements to the LCFS programs, including the addition of new Tier 1 calculators for low-carbon pathways to streamline their approval process. We appreciate the flexibility in the current regulations to allow users to modify default inputs to better reflect the processes being modeled and would ask CARB to continue providing that flexibility to ensure maximum accuracy. Further, we appreciate CARB's efforts to continuously improve the accuracy of the carbon intensity of fossil fuels and welcome the collaboration with Stanford University to update OPGEE. We encourage CARB staff, as a key part of this improvement process, use up-to-date California- and industry-specific emissions data to effectively "true-up" calculations during the model improvement process

Slides 16-17: Streamline Implementation and Enhance Exportability

WSPA appreciates CARB's efforts to make their program more exportable to other jurisdictions considering or implementing an LCFS. Consistent methodologies and valuations are critical to optimizing both fuel supply and the economic impact of carbon reduction. The optimal approach would be to adopt lifecycle analysis models and pathway approval processes that can be shared

across jurisdictions. WSPA encourages CARB to work with other jurisdictions operating or considering LCFS-like programs to pursue such an approach.

To streamline the alignment process, reduce the burden on regulatory staff and improve consistency across programs we encourage the formation of an independent body capable of adopting and maintaining life cycle assessment (LCA) models and evaluating and approving fuel pathway applications, which would then be qualified for use under all participating programs. Such a body would operate like the Voluntary Consensus Standard Bodies that currently maintain methods and specifications related to fuel testing and properties. Understanding that this may be a larger effort than can be accomplished within the scope of this rulemaking, we believe that such an effort is worthwhile, and this rulemaking offers an opportunity to begin to put the framework in place to develop and implement such an approach.

Slide 16: Remove Deemed-Complete Designation for Fuel Pathways

WSPA does not support the removal of the "deemed complete" step of the fuel pathway application process. CARB's desire to streamline the application process and remove bottlenecks is understood. However, there is a risk that it may take more than one calendar quarter to complete the validation and certification of a pathway application and complete the necessary technical steps to enable reporting in the LCFS Reporting Tool. This could force a producer to operate under an economically challenging temporary pathway for multiple calendar quarters. It is understandable that rushing to review applications and deem them complete during the quarter submitted creates an unnecessary burden for CARB staff.

We suggest that CARB amend the regulation to make new pathways available for use for the quarter being reported when deemed complete rather than the current quarter. This will reduce the pressure to complete the reviews in the submittal quarter while still providing a safety measure for those times when application reviews may go beyond one quarter. If CARB is able to review and certify a pathway application within a single quarter, the "deemed complete" step can be skipped or assumed to have happened simultaneously. Further, LCFS language can be added to state that CARB staff would have to approve or reject a fuel pathway within 30 days after the third-party validation report is published. If CARB does not respond within the 30-day timeline, the pathway should be automatically considered approved.

Slide 16: Develop a Single CI Benchmark Table

It is unclear what is meant by a single CI benchmark table for gasoline, diesel, and substitutes. If this refers to a single set of standards to be shared between LCFS programs, WSPA is supportive. If the proposal is to have a single annual CI benchmark for all fuels, that does little to simplify the program and introduces the risk that some fuels may be given an artificial advantage or disadvantage through a less direct comparison to the fuels they displace.

Slide 18: LUC and Site-Specific Agricultural Inputs

WSPA supports CARB reviewing indirect land use values based on recent studies and allowing more flexibility in the Tier 1 Calculators for specific farming inputs, including options to select specific regions of the U.S. or the World by type of crop.

Additional Topic: Temporary Fuel Pathway True-Up

WSPA recommends that the future changes in the LCFS Program include a provision that once a

fuel pathway is approved, the LCFS credits that were generated based on a temporary fuel pathway value be "trued-up" to the provisional or operational CI value retroactively. This concept was discussed in a prior CARB LCFS workshop and WSPA requests continued consideration.

Additional Topic: Updating CCS Protocol

WSPA recommends that the LCFS Program's Carbon Capture and Sequestration (CCS) Protocol (dated 8/13/2018) be considered as part of the LCFS amendment process to enhance the opportunities for CCUS projects in California, rather than a distinct and separate rulemaking process to be undertaken at some later date. Suggested elements for consideration may include project application and permitting process, clarification of land and geologic issues (i.e., pore space ownership, project unitization, liability, mineral rights, etc.), and project ownership/transferability.

WSPA appreciates the opportunity to provide comments on this important regulatory process. If you have any questions regarding this submittal, please contact me at this office or via email at creheis@wspa.org.

Sincerely,