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Thomas A. Umenhofer, CCM, REPA

Vice President

July 18, 2016

Carol Sutkus Kirsten King Cayabyab Air Resources Board 1001 I Street Sacramento, CA 95814 via e-mail at: <u>carol.sutkus@arb.ca.gov</u> via e-mail at: <u>kirsten.cayabyab@arb.ca.gov</u>

Re: WSPA Comments on ARB Proposed 2016 State Strategy for the State Implementation Plan

Dear Ms. Sutkus and Ms. Cayabyab:

The Western States Petroleum Association (WSPA) is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California and four other western states. WSPA appreciates the opportunity to provide comments on the Air Resources Board (ARB) proposed 2016 State Strategy for the State Implementation Plan (SIP Strategy) which describes proposed measures to achieve the reductions from the mobile sector and consumer products.

Specifically, WSPA would like to provide feedback to ARB regarding the updated ARB Mobile Source Strategy (MSS), dated May 16, 2016. This document is considered by ARB as a key part ARB's integrated planning effort in the development of the SIP Strategy. Section 10 (Fuels) of the MSS is of particular significance as it applies to diesel and renewable diesel fuels. In Section 10 (pages 153-154) of the MSS, ARB proposes the following:

"ARB would bring to the Board a proposed measure that would require Low-Emission Diesel to comprise a steadily increasing percent of the ARB diesel pool. Due to the magnitude of needed NOx reductions in the South Coast and the large volumes of Low-Emission Diesel needed for full statewide implementation, the proposed measure would be phased-in with a gradual implementation strategy that starts in the South Coast, and subsequently expands statewide.

This standard is flexible and enables multiple fuel types to meet this standard. The specifications of Low-Emission Diesel would require less than one percent aromatics, virtually no sulfur, and a blendstock carbon intensity maximum of 30-60 gCO2e/MJ. This standard is anticipated to increase consumption of Low-Emission Diesel fuels, including: renewable diesel from biomass, NOx-mitigated biodiesel, renewable natural gas from biomethane, gas to liquid diesel from biomethane, renewable hydrocarbon diesel, and/or co-processed renewable hydrocarbon diesel. This proposed measure would provide NOx benefits predominately from legacy (pre-2010) on-road heavy-duty vehicles, off-road engines, stationary engines, portable engines, marine vessels and locomotives, as well as NOx and Diesel PM benefits in potentially all model year off-road engines, stationary engines, portable engines, marine vessels and locomotives. Interstate vehicles, even those registered out-of-state but operating on ARB diesel blended with Low-Emission Diesel, are also anticipated to provide emission reduction benefits.

> 1415 L Street, Suite 600, Sacramento, California 95814 (805) 701-9142 • Fax: (916) 444-5745 <u>tom@wspa.org</u> • www.wspa.org

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This standard would complement existing ARB programs that incentivize increased use of renewable fuels as substitutes for conventional gasoline and diesel fuels, and will focus on more completely transitioning the fuel mix away from petroleum based diesel to a cleaner, renewable mix of diesel substitute fuels. Potential diesel substitutes that may be considered include renewable diesel from biomass, NOx mitigated biodiesel, renewable natural gas from biomethane, gas to liquid diesel from biomethane, renewable hydrocarbon diesel, and/or co-processed renewable hydrocarbon diesel. The proposed measure is anticipated to diversify the fuel pool, as it will incentivize increased production of Low-Emission Diesel fuels. This proposed measure would require incremental progress toward a goal of Low-Emission Diesel comprising 50 percent of the on and off-road diesel sold in State by 2031."

Specifically, WSPA has several concerns regarding the above proposal that we believe need to be addressed before moving forward with the proposed Low-Emission Diesel program:

Concern 1 - Lack of Clarity in Defining Low-Emissions Diesel

WSPA has several key questions regarding Low-Emissions Diesel (LED). What is the disposition of conventional gas to liquids (GTL) fuels and other like fuels in this strategy? Why add the carbon intensity component to the LED when the LCFS standard and Cap and Trade program already does this? This fuel could provide significant NO_x and PM reductions similar to renewable diesel. This measure should focus on emissions and allow the market to determine how to get there within the confines of the regulations currently in place.

Concern 2 - Questionable Projection Methodology

Unlike the "top-down" approach used in estimating Renewable Diesel (RD) volumes through 2020 in the Low Carbon Fuel Standard (LCFS) and for Advanced Diesel Fuels (ADF), this analysis is based on "bottom-up projections." Top-down in this context means looking at what RD plants are in operation (or may be in operation in the subject time frame) to arrive at a total renewable diesel available figure to which a "how-much-of-that-is-coming-to-CA" factor is applied. The MSS estimates appear to go all the way to starting with available feedstock that could be converted to RD globally. If this is a correct interpretation of how estimates are calculated, then the estimate could potentially yield an increase in RD into California that is 3 times (or more) higher than the 2020 estimates in ARB's illustrative scenario case (which may be an overestimate to begin with). WSPA requests that ARB explain the assumptions used to determine the available feedstock.

Concern 3 - Lack of Demonstration of Measurable Benefit

By ARB's own figures, later model year trucks equipped with NO_x traps and PM filters will constitute more than 90% of the fleet by 2023. In addition, there is another measure in the MSS that drives the engine manufacturers to ever lower exhaust emission targets. With those two key elements in mind, it is not clear what the benefits of the resultant potentially highly-expensive fuel would be. WSPA would like ARB provide a forecast of market share for legacy on-road diesel vehicles in 2025 as well as the projected off-road fleet. How did ARB separate the impact of vehicle technology from the impact of the LED fuel? What is the incremental benefit of the LED fuel over the new technology vehicles?

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Concern 4 - Uncertainly in Demand for Diesel

The ARB proposal suggests that for LED which would create a set of circumstances that do not exist today. To fully analyze this issue, WSPA believes that ARB would need to answer several sets of critical questions:

- a. For example, what are the incremental criteria and GHG emissions resulting from the potentially displaced volume of diesel being exported from California? Does ARB assume that the displace diesel will be exported or that refinery capacity will be reduced proportionally?
- b. Where does ARB anticipate the additional renewable diesel will come from? Is it produced in-state? What are emissions from this production?
- c. If it is imported into California, where does it come from and how does it get here? What are the emissions from the transportation of the renewable diesel?
- d. What would be the AB 32 Cap & Trade Program implications of the increase in renewable diesel imports? Would this cause emissions leakage and/or require border carbon adjustments?

These are important questions that must be addressed before proceeding with the MSS as it is currently written.

WSPA requests that ARB take an additional look at each of these concerns and provide a response that not only addresses the concerns but provides viable options to eliminate or minimize these concerns. Further, WSPA believes that a better approach needs provided (through consultation with the industry sector) than the broad state-wide measure currently put forward. Obviously, the need for emission reductions is regional (i.e., not state-wide) while the availability of LED will be extremely limited and the costs prohibitively high. The logic of not directing that limited volume only to the areas where the needs are greatest should be examined closely by ARB. This effort could include analysis of the implication of "leakage" into the area of non-LED fuel and out of the area of LED fuel, of potentially bifurcating on-road and off-road diesel supply, and other potential distribution optimization opportunities.

WSPA appreciates ARB's consideration of our comments, and we look forward to your responses. If you have any questions, please contact me at (805) 701-9142 or email tom@wspa.org.

Sincerely,

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cc: Richard Corey - ARB Edie Chang - ARB Cathy Reheis-Boyd - WSPA