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October 21, 2020

Mr. Michael Benjamin  
Chief, Air Quality Planning and Science Division  
California Air Resources Board  
P.O. Box 2815  
Sacramento, CA 95812

Re: ***Comments on CARB's Draft 2020 Mobile Source Strategy***

Dear Mr. Benjamin,

On behalf of our two organizations representing the cotton and tree nut industries, the California Cotton Ginners and Growers Association (CCGGA) and the Western Agricultural Processors Association (WAPA) wish to thank you for the opportunity to provide comments on the California Air Resources Board's (CARB's) DRAFT 2020 Mobile Source Strategy. This ambitious and all-encompassing approach to address both greenhouse gas (GHG) and criteria pollutant emissions is concerning, and in some ways will actually delay short term, but significant air quality improvements with little more than goals that are unproven and, in some cases, maybe not even possible.

Our comments will center on three specific areas. First, we are extremely concerned with the impact on the current and highly successful effort to replace agricultural equipment with new Tier 4F equipment due to the fact that this new equipment will again be forced to be replaced in less than 10 years to meet these new goals. Second, we are concerned with the proposed goals that are not yet demonstrated and at this point not anywhere near cost effective. Lastly, we are concerned with the overwhelming impact the proposed strategy will have on agriculture with the cumulative impact of all of the strategies laid out in the proposed plan including, trucks, agricultural equipment, transportation refrigeration units (TRUs) and large spark ignited (LSI) equipment (i.e. forklifts). These regulations will be implemented in roughly the same time period causing significant economic harm to an industry which does not have the ability to pass along any increased cost due to being subject to a world market price.

#### Agriculture Equipment – Tractors and Harvesters

Our initial concern here is what happens to the effort to achieve the current PM2.5 SIP goals of 11 tons of NOx reductions by 2023 in the San Joaquin Valley. With a looming requirement to purchase all Zero Emission Vehicle equipment by 2035, why would any grower, cotton gin, tree nut huller or processor invest in purchasing a Tier 3 or Tier 4 piece of equipment at this time, only to be forced to replace the unit in less than 14 years? According to the San Joaquin Valley Air Pollution Control District, more than 8,100 tractors have been replaced creating more than 17 tons of NOx reductions per day. In addition,

almost 1,900 agricultural UTVs have been replaced with zero emission ATVs creating 374 tons of NOx, VOC and PM lifetime emission reductions. According to the Air Resources Board<sup>1</sup>, as of March 31, 2020, more than 87,500 MTCO<sub>2e</sub> tons/day have been reduced as well as 470 tons of PM<sub>2.5</sub> and 7,800 tons of NOx. This tremendous improvement will now cease as growers try to save towards these new requirements and not have to replace equipment before the end of its useful life.

Beyond the current crisis created by this proposal, we are seriously concerned on the economic impact to agriculture moving forward. In table 8 of the proposed MSS, the document identifies “develop Tier 5” standards as a proposed strategy for agricultural equipment. What is Tier 5 and what are the emission levels? Have these levels been achieved commercially? At the bench scale? In discussions with at least two agricultural equipment manufacturers, they had no idea what Tier 5 was or what it could achieve. With less than 15 years before this target deadline, how will this be achieved? By comparison, we have looked at electric yard trucks at a cost of \$285,000 plus the cost of the charging station, as compared to a new compliant diesel powered yard truck at a cost of \$150,000. Will the cost of the electric tractor be of similar scale? A brand new tier 4 final cotton harvester costs upwards of a million dollars. What would the cost of an electric cotton picker be? Again, we remain concerned that growers will decide to hold off in the short term to make sure they are going to get their return on investment thereby jeopardizing the 2023 attainment goal.

Another concern that must be considered here is economic competitiveness and how that not only impacts growers, but agricultural equipment manufacturers as well? With California the only market pushing a Tier 5 or electric, will manufacturers even worry about California? If they do, how much will it cost, and how is a producer in California supposed to compete with growers in other states or countries that are not looking at that? One recent example is the purchase by an almond huller in California who spent \$360,000 for a new Tier 4 Final loader, while a similar operation in Australia spent only \$60,000 for the same model loader, but equipped with a Tier 0 engine. This is not sustainable for California agriculture.

#### Heavy Duty On-road Trucks

The proposed requirement for the complete electrification of heavy-duty equipment undoubtedly places agriculture in a difficult position to comply. With the passage of the Advanced Clean Truck Regulation (ACT) earlier this year, engine manufacturers and larger fleets with at least one piece of equipment over 8,500 GVWR would be required to meet fleet turnover requirements to electric over the course of the next 15 years. The Mobile Source Strategy expands the requirements for electrification of heavy equipment beyond ACT applicable operations. Independent equipment owner operators as well as smaller businesses that don't meet ATC applicability requirements, will be in a more disadvantageous position to turn over their fleets. These same businesses have had to make considerable investments and even downgrade their fleet size, to meet current 2010 engine Model Year requirements to for existing Truck and Bus standards. The Mobile Source Strategy would now require those same businesses to make even more significant investments on the most technologically advanced equipment to date.

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<sup>1</sup> “Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program – Statewide Infographic”, reported as of March 31, 2020, <https://ww2.arb.ca.gov/sites/default/files/classic/ag/agincentives/outreach/farmerinfographic.pdf>.

Another point to be made is that specialized equipment such as module haulers, utilized during cotton harvest to transport harvested cotton from the fields to the gins, have not been designed to meet the electrification requirement prescribed within the Mobile Source Strategy. The remaining module hauler manufacturers are not focused on the electrification of such heavy equipment, and will turn their marketing and sales focus towards states without these requirements.

#### Transportation Refrigeration Units (TRUs)

The requirement for all transportation refrigeration units (TRUs) to be electric will be extremely costly for the state's agricultural operations, especially when the cumulative impact of all these regulations is levied on these operations during the same time period. Not only is it costly for the packing house or processor, how do we force out of state trucking companies that are nationwide haulers to comply with this one state requirement? We realize this is being conducted under a separate rulemaking, but feel it is important to comment here to emphasize the cumulative impact of all of these regulations being applied to agriculture at the same time.

#### Forklifts

Our concern here lies with the fact that electric forklifts have not been built for the "rough terrain" category, which is primarily used by agriculture, especially at cotton gins and almond hullers. This is due to the need to have pneumatic tires and work on uneven and mostly dirt terrain, like you would typically find at an unpaved gin yard or almond huller yard. This may not be cost effective or technologically feasible, and seems premature to move forward at this time. Furthermore, we want to reiterate our concern with implementing this control measure at the exact same time as all of these other measures, and the economic harm it will bring to the agricultural industry.

#### Electricity – Reliability and Cost

The agricultural industry is extremely concerned about the reliability of the electricity supply, especially during evening hours when we might be irrigating or charging equipment for the next day. We have already experienced rolling blackouts and power system power shutoffs (PSPS) events. Recently<sup>2</sup>, the California Independent System Operator (ISO) commented "In transitioning to a reliable, clean and affordable resource mix, resource planning targets have not kept pace to lead to sufficient resources that can be relied upon to meet demand in the early evening hours..." This is a serious and significant problem when trying to get industry to move to all electric.

At the same time as we have been experience reliability problems, the utilities have had no problem increasing electrical rates and are preparing to again, especially for agriculture. In PG&E's current General Rate Case (GRC) they had a 15% increase across the board in Phase 1, and are proposing a 7% increase just for agriculture in Phase 2 by 2022. They are also proposing an additional 13% increase for agriculture by 2025. Similarly, Southern California Edison (SCE) is proposing a 36% increase in rates by the end of 2023 in their current General Rate Case. How can agriculture afford those increases and be forced to consume even more electricity by converting to all electric vehicles and equipment? Simply put, the agricultural industry cannot. Our electricity rates are higher than other states and twice the national average. This will only serve to exacerbate that economic disparity.

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<sup>2</sup> "Preliminary Root Cause Analysis – Mid-August 2020 Heat Storm, Report to the Governor, California Independent System Operator, California Public Utilities Commission, California Energy Commission, October 6, 2020.

Incentive Funding –

One area where we completely agree with CARB is the need for incentive funding. This is the best and only solution for agriculture given the inability to pass along the cost of purchasing all of this new equipment. As we have demonstrated in the comments presented earlier in this letter, agriculture can and will meet its commitment, as long as incentives can be provided and utilized. This has been proven year after year, as the District's incentive programs have been oversubscribed each and every time, clearly demonstrating that these program can be successful and achieve the goal of cleaner air.

Under the section entitled "Mobile Source Strategy Scenario", CARB indicates the staff assumed continued incentive funding opportunities in this sector through 2031. While this is laudable and very much appreciated, it is far from guaranteed. In fact, the current funding programs are scheduled to sunset as follows:

- USDA NRCS EQIP (Farm Bill) – 2023
- Carl Moyer – end of 2023
- San Joaquin Valley Vehicle License Fee Surcharge – June 2024
- Farmer – only proposed for 2021, no guarantees afterward
- Federal EPA Programs (very limited funding)
  - Diesel Emission Reduction Act (DERA) – award based – no guarantees
  - Target Airshed grant – award based – no guarantees

The section assumes average funding over the past 4 years as the funding level going forward through 2030. How do we achieve that? How does ARB plan to get these programs renewed at the levels indicated? While we question how this will be done, we stand ready to expend all resources to assist in the effort to secure this vital funding.

In closing, we wish to thank you again for the opportunity to comment on the proposed MSS and look forward to working with on solutions that are technologically feasible and cost effective. Should you have any questions, please feel to contact me at (559)252-0684 or via email at [roger@ccgga.org](mailto:roger@ccgga.org).

Sincerely,



Roger A. Isom  
President/CEO