

SIERRA CLUB



KERN-KAWEAH CHAPTER

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September 30, 2018

San Joaquin Valley Air Pollution Control District
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California Air Resources Board
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re: Comments on Draft PM2.5 Plan

Please accept these comments on behalf of the Kern-Kaweah Chapter of the Sierra Club. Our chapter has members in Kings, Tulare, and Kern Counties. We have long advocated for cleaner air in the San Joaquin Valley, both for the health of residents and the health of our ecosystem.

We have a few suggestions for this important PM2.5 plan. They are given below by topic.

- **Wood burning by residents**

The time has come to protect all residents in the valley from the dangerous particles found in wood smoke which is originating in residential areas. This wood smoke contains soot, or PM2.5, and toxic chemical elements. The so-called “clean stoves”, or EPA certified wood stoves, are not clean either. These marginally cleaner stoves should not be encouraged in any way.

The solution to this problem is to tighten the criteria for no-burn days to only those days when the predicted 24-hour average will be above 12 micrograms per cubic meter. This should be done for all months of the year when wood burning activity occurs, more specifically, October through March. There should not be any separate criteria for “clean” stoves. Strong enforcement of this rule is necessary. Having different levels of no-burn criteria for different types of stoves and for different areas of the valley makes no sense and is difficult to enforce

The idea of having stricter standards for so-called hotspots does not make sense either. People in any residential area of the valley deserve protection from woodsmoke just like they deserve and have protection from second hand cigarette smoke. If a PM2.5 monitor in Modesto or Tracy is not showing violations of the PM2.5 standard, that does not mean residents living a few miles away from those monitors are not breathing wood smoke which is consequently harming their health.

- **Agricultural dust**

This is an area where far more can and should be done. According to data from monitors PM10 levels are seemingly climbing higher each fall where there are PM10 monitors. This may be from increased acres of crops such as almonds which, in turn, produces increased amounts of dust during the harvest months of August through October. There is no question that a fraction of PM10 is PM2.5. There should be a definitive study on what that fraction is from activities such as almond harvesting.

The first step should be incentivizing farmers to purchase low dust emitting harvesting equipment that do not simply blow the dust but allow the dust to settle almost immediately. We understand the incentive is already available which is good. But, the sale of machines without dust suppression technology should also be prohibited. Finally, a schedule for mandatory phase out of older equipment without this technology needs to be implemented. This mandatory phase out should certainly be a contingency measure.

There is some language in the plan that may lead to a stronger Conservation Management Practice rule. Any changes to this rule need to be specified in the plan. We recommend changes that would further slowdown vehicles, including off-road types, on unpaved roads. Visible plumes of dust with opacity above specified levels should be prohibited. Heavy loads on trucks also raise plumes of dust from untreated road shoulders. Any truck raising plumes of dust along paved roads should have to slow down or take another route. The busiest routes should have better shoulder treatments to eliminate this type of dust from heavy vehicles. There should be fines for visible dust plumes from any type of road because the solution is simple. The rule should specify that vehicles must either slow down or treat the road or shoulder to suppress the dust. Putting up 10 mph speed limit signs is not enough to slow people down in the fall when the growing season is over.

- **Stationary engines**

We see many agricultural pumps run by internal combustion engines. It is time for a mandatory rule forcing the switch to electric pumps when electricity is available within 660 feet or 1/8 mile. It is not enough to simply continue to incentivize this change. But, perhaps a partial incentive from the air district for solar panel installations for ag pumps would be appropriate along with the incentive for the electric motor. This would offset the higher cost of electricity compared to diesel or natural gas and reduce NOx emissions significantly in some areas.

In a related area, we do not know how significant internal combustion engines are for pumping oil but have noticed several in operation near populated areas such as in the North Shafter Oil Field. These should be looked at to see why cleaner electricity is not being used because the electrical lines are very near to these engines.

Doing more with stationary internal combustion engines also has total synergy with California's GHG reduction goals under AB32.

- **Restaurant charbroiling**

Restaurant charbroilers emit toxic and harmful PM2.5 throughout the valley. We do not support a rule that cleans up this emission source only in a few hotspot areas. Residents who live near to these sources suffer from their emissions everywhere, even if a monitor in their area shows overall clean air. Actually, breathing these soot particles is dangerous to everyone even if a monitor 20 miles away says the average air quality in the area is healthy. Any health agency should be anxious to protect all residents within their jurisdiction equally from this source of pollution.

Making a rule for the entire valley is the only fair way to treat these facilities. Of course, there is not enough money to provide every charbroiler in the valley with a particulate filter. But, if every facility has to pay some of the cost on an equal basis, there is no competitive advantage between restaurants in one location and similar restaurants which may be just a few miles away. Also, the health concerns of all residents are treated equally. The current proposal for a hotspot strategy for charbroilers is not fair on many levels.

- **Indirect Source Rule**

This is a good rule in theory. But, it needs to be enforced by the air district for every new valley development, no matter what a local jurisdiction decides is appropriate. The air district has let many projects slip through local "loopholes" and avoid the rule. The air district should retroactively apply the ISR rule to these projects built since the rule was implemented.

The ISR rule could also be strengthened requiring a greater level of mitigation for these new, but indirect emissions.

On a related note, the size of projects that are required to mitigate indirect sources of air pollution should be decreased significantly. Any development of 50 or more homes should be required to mitigate, not the current threshold of 390 homes. Also, these projects should have to mitigate cumulative emissions for the life of the project.

The district's eTRIP rule (Employee Trip Reduction Implementation Plan rule) should also be strengthened by lowering the threshold for when it applies and making requirements more significant.

- **Open agricultural burning**

First, we note that there is no feasibility study for the alternative to the open field burning practice of Whole Orchard Recycling. Yet, this method was mentioned as important in at least three presentations at the air district sponsored biomass summit this past year. In fact, the UC Davis ag extension scientist made a presentation showing that the practice can pay for itself several times with increased yields during the first ten years after replanting new trees into the soil containing the incorporated biomass from the old trees. Also, there were no significant negatives to the practice other than perhaps, a slightly higher initial cost compared to grinding the wood and hauling it to a biomass incinerator.

The air district has made their abatement fees for the illegal practice of open burning too cheap. The \$500 per acre fee plus the charges for pulling out the trees and putting them in piles is the cheapest option for the farmer so many are doing that despite the negative consequence of putting tons of black smoke into the air of near and far neighbors. We recommend the abatement fee be raised to at least \$750 per acre to discourage open burning.

The feasibility of Whole Orchard Recycling has now been proven on thousands of acres, at least in Kern County where we have observed first hand this increasing practice. Each of the past three winters have seen more farmers choose this practice. Farmers both want to be good neighbors and the practice is actually beneficial to their bottom line. This should be encouraged with an incentive from the air district of \$250 per acre for a couple years and then mandated after that. Biomass incinerators still in the valley are too dirty to be encouraged any longer. Whole Orchard Recycling has a perfect synergy as well with California's GHG reduction goals. Do not use the excuse that further study is needed to include this in the PM2.5 plan.

- **Ammonia controls**

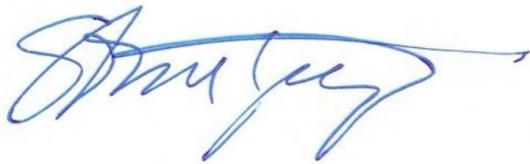
The precursor analysis for ammonia shows that ammonia reductions at dairies of 50% would give significant reductions of PM2.5 at the present time. The excuse for not attempting to get these reductions is twofold. One, apparently these

reductions are not needed to reach the attainment goals in 2024/25. Two, no one seems to know if this level of reduction for ammonia is feasible.

The first problem with these excuses is that the total reductions in NOx predicted in this plan is dependent on funding which may not materialize. Any shortfall in NOx reductions in 2024 will make ammonia reductions more important at that point in time. We also have seen the study that total soil NOx emissions may be significantly underestimated. This result may be confirmed in the near future making the predicted NOx reductions in the plan insufficient. This would also make ammonia reductions significant in 2024.

The second excuse of no feasibility concerning dairy ammonia reductions is not valid. The majority of ammonia at a factory dairy is released because the manure has been liquified and aerated. Because this same process produces methane, a GHG, money has been allocated by the state to subsidize the reduction of methane emissions through feasible methods of dry manure handling. This is exactly what is needed to also get large reductions of ammonia. Dairy digesters, on the other hand, do not reduce ammonia because the liquified manure in the digester is transferred to another lagoon for aeration after some of the methane has been removed. The feasibility of decreasing ammonia through dry manure handling is proven and available today. Mandatory ammonia reduction goals should be part of this PM2.5 plan as a contingency measure when, and if, it is known that the required NOx reductions will not be forthcoming.

Thank you for considering these comments.

A handwritten signature in blue ink, appearing to read "Steve Montgomery", with a long horizontal flourish extending to the right.

Steve Montgomery

Chair, Kern-Kaweah Chapter Sierra Club