

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

Significant Comments and Responses

June 27, 2012

SUMMARY OF SIGNIFICANT COMMENTS FOR THE PM2.5 PLAN

VERBAL COMMENTS, APRIL 30, 2012 WORKSHOP

Approximately 18 people (non-District, non-ARB) in attendance (9 Fresno, 7 Bakersfield, 2 Modesto)

BGC Environmental Brokerage Services (BGC)
California Cotton Ginners and Growers Association (CCGGA)
Central Valley Air Quality Coalition (CVAQ)
Coalition for Clean Air (CCA)
Evan Shipp (Shipp)
Evolution Markets, Inc. (EM)
Fresno Metro Ministry (FMM)
Southern California Gas Company (SCGC)
Krazan and Associates (KA)

1. **COMMENT:** Will the PM2.5 plan address the offset ratio for inter-pollutant trading using SOx emission reduction credits (ERCs) to offset PM2.5 and if so, will the proposed ratio be different than 40:1 ratio set by EPA? **(EM)**

RESPONSE: The District and ARB are in the process of conducting the modeling and other analysis necessary to document appropriate interpollutant trading ratios for the Valley for both NOx to PM2.5 and SOx to PM2.5. These ratios would replace EPA defaults for the Valley. This analysis will be available in future plan drafts.

2. **COMMENT:** Are any reductions to existing inter-pollutant ERC holdings anticipated to meet objectives of the PM2.5 plan? Is there a timeline proposed for labeling PM10 ERCs in the ERC registry as PM2.5 vs. PM10? **(BGC)**

RESPONSE: ERCs will be addressed in future plan drafts. At this time, the District does not expect to retire any existing ERC holdings as a part of the attainment planning effort. The District does not plan to identify the percentage of PM10 ERCs that are PM2.5. For purposes of the plan, we intend to conservatively consider all PM10 ERCs to be PM2.5.

3. **COMMENT:** PM2.5 trends over the last five years appear to be flat. The weight of evidence analysis should include an examination of trends among more recent years, including meteorologically-adjusted trends and species trends. **(Shipp)**

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RESPONSE: Appendix A includes an extensive discussion of PM2.5 trends since 1999, when PM2.5 monitoring began. This analysis considers both long term trends as well as more recent patterns. This analysis will be expanded in future drafts. This will include meteorologically adjusted PM2.5 trends and speciated trends that are currently being evaluated by the District and ARB.

4. **COMMENT:** Do the PM2.5 species pie charts on slides 16-17 represent one day with a high PM2.5 concentration? If so, which day? **(FMM)**

RESPONSE: The PM2.5 species pie charts represent an average among days in Fresno and Bakersfield with high PM2.5 concentrations. They are not tied to any particular day.

5. **COMMENT:** Ammonium nitrate trends for Bakersfield and Fresno were presented. What is the difference between Bakersfield and Fresno in regards to NOx and ammonia emissions? **(FMM)**

RESPONSE: A monitor can be impacted by emissions from outside its county, and down-wind missions in its county may not affect the monitor at all. As such, rather than focus on county emissions, the District's receptor modeling (also known as linear rollback) will evaluate emissions that occur in an area of influence near that monitor. This analysis (to be included in a future draft) will corroborate photochemical modeling to determine the contribution of ammonium nitrate in future years as well as the magnitude and types of emissions that are driving that contribution.

6. **COMMENT:** In regards to the rule effectiveness evidence presented for the Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters), what was the contribution from agricultural burning and how can you tell if emissions are coming from fireplaces versus agricultural open burning? **(FMM)**

RESPONSE: Since agricultural burning is minimal during the winter in the San Joaquin Valley, the improvement in PM2.5 concentrations shown through the Rule 4901 effectiveness analysis is mostly attributable to residential wood-burning.

7. **COMMENT:** Will the 1-hour ozone plan be prepared concurrently? What is the timeline for the 1-hour ozone plan? **(CCA)**

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RESPONSE: The 1-hour ozone plan will not be prepared concurrently with the *2012 PM2.5 Plan*. There is currently not a timeline for a 1-hour ozone plan.

8. **COMMENT:** Please describe why July 4 - 5, 2007 would be considered an exceptional event, as described on page A-9. **(CCA)**

RESPONSE: Federal regulations (40 CFR 50.14(b)(2)) indicates that fireworks displays qualify as an "exceptional event" and, with EPA concurrence of local or state documentation, are not used in design value calculations.

9. **COMMENT:** How will incentive programs be utilized as control strategies, as stated on Slide 44? **(CCA)**

RESPONSE: As noted in the Chapter 5 summary, incentive programs are an integral part of the emission reduction efforts of the District. The District is thoroughly evaluating potential control measure opportunities for technological feasibility, reasonably available control technology, cost effectiveness, relevance to attainment, and opportunities for improved public health. Based on this analysis, the District will determine which type of strategy, if any, is most appropriate for each control measure opportunity. These control strategies options will include regulations, incentive programs, and other approaches.

10. **COMMENT:** Does the emissions inventory for farming operations include the latest information from recent research studies? This includes the cotton gin study, the almond study, and the new emission factors that resulted from the MRI study for the off road dust. **(CCGGA)**

RESPONSE: The draft emissions inventory is based on information that was available to ARB staff as of December 2011. It does not yet include the results of the cotton gin or the almond studies. ARB plans to include the revised almond emission factors in the final inventory. The cotton gin study is not yet completed. The District recognizes the value of these and other related studies, and will work to ensure that they are used as appropriate to enhance the emission inventory.

The unpaved road dust emission estimates reflect an emission factor derived from recent Western Regional Air Partnership (WRAP) studies, which include the MRI study cited by the commenter. ARB uses a 10% PM2.5/PM10 size fraction, which is the same fraction used in the U.S. EPA's AP-42 emission factor equation for unpaved roads.

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11. COMMENT: Are reductions from incentive programs included in the inventory for farming equipment? **(CCGGA)**

RESPONSE: The farm equipment inventory is based on ARB's OFFROAD2007 model, and it does not include reductions from incentive programs. ARB is working with a group of agricultural stakeholders and District staff to determine how best to reflect incentive programs in the SIP.

12. COMMENT: The inventory for farming operations listed on page B-5 states that directly emitted emissions are increasing, which seems to be contrary to other sources of information and should be reviewed. **(CCGGA)**

RESPONSE: The draft PM2.5 emission estimates presented for the April public workshop for farming operations were based on projections derived from harvested crop acreage for the years 1999 to 2010, as reported by the county agricultural commissioners to the USDA's National Agricultural Statistics Service.

District staff has worked with ARB to review the data from both sources and has come to the agreement that the data from the FMMP is more accurate and appropriate for the Valley. As such, the emission inventory will be updated as appropriate

13. COMMENT: Our company has developed an apparatus that could reduce emissions from open hearth fireplaces. As previously discussed with the District Staff, the project does not fit within the categories needed to qualify for funding under the Technology Advancement Program (TAP). We ask that you expand the TAP categories to include retrofits of fireplaces so that our device fits into your rule. **(KA)**

RESPONSE: District Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters) does not require or prohibit specific technologies be installed, only that those technologies meet EPA certification requirements. The District will consider revising its TAP categories to include fireplace retrofits.

14. COMMENT: Clarify the use of long-term trends versus short term trends. **(CVAQ)**

RESPONSE: Meteorology fluctuates from year to year, and this can cause -to-year variation in PM2.5 concentrations due to meteorology. Longer trends can smooth out these fluctuations and provide a better perspective on the overall progress. Trends relating to the "cleanest winter on record," for example, are long-term trends based on all available data. Shorter term trends can help you understand the impacts of recent weather patterns or recent emissions reductions efforts.

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15. COMMENT: What are the key components in the formation of nitric acid? **(CVAQ)**

RESPONSE: Nitrogen dioxide (NO₂) reacts with OH in the atmosphere to form nitric acid (HNO₃). This requires the formation of OH radicals from hydrocarbon gases by interaction with NO in photochemical action during the day.

Nitric acid can also form when nitrogen dioxide (NO₂) reacts with the nitrate radical (NO₃) in the presence of atmospheric water (H₂O). This happens at night when NO₂ reacts with ozone (which was formed during the day for surface level ozone) to form the NO₃ radical.

Both pathways involve photochemical action. The night reaction is not as obviously from photochemistry, but if the ozone (near the surface) was not formed in the day by photochemistry, it would not be available at night for the alternative nitric acid formation pathway.

16. COMMENT: When will VOCs and ammonia be added to the inventory? **(CVAQ)**

RESPONSE: VOCs and ammonia inventories will be included in the next draft plan.

17. COMMENT: Distribution centers have zero idling rules imposed on them. Can incentive funding be used for electrification at distribution centers under the ARB Idling Rule? These operations should be viewed as stationary sources and not mobile sources. **(CVAQ)**

RESPONSE: The District reminded the commenter that ARB has already adopted an anti-idling regulation that already prohibits idling from trucks, including at distribution centers (California Health and Safety Code Section 2485). Prior to this regulation, the District funded a number of projects providing idling alternatives. However, since idling is now prohibited, such reductions would not be surplus and incentives are not available. The District also informed the commenter of restrictions on the District's authority to regulate interstate commerce and mobile sources.

18. COMMENT: What PM_{2.5} AQI scale was used in the AQI analysis within Appendix A? Was it a District defined scale, or the official scale from EPA? **(CVAQ)**.

RESPONSE: The current and official EPA PM_{2.5} AQI scale was used in the AQI analysis within Appendix A.

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19. COMMENT: What is the difference in the annual versus winter time emissions inventory? **(SCGC)**

RESPONSE: The annual emissions inventory represents the average daily emissions for the entire calendar year. The winter emissions inventory represents the average daily emissions for November through April.

20. COMMENT: What is the commending procedure for this plan? Are there 45-day comment periods, or 30-day? **(SCGC)**

RESPONSE: Comments received by 5:00 PM on May 14, 2012 will be presented in the next draft of the plan as appropriate. Comments received after this time will be presented in later drafts of the plan. Stakeholders are encouraged to provide comments whenever possible for evaluation and incorporation into the plan as appropriate.

The District generally provides a two week comment period after public workshops for stakeholders to submit comments that will be incorporated into the next draft of a staff report or plan document. However, there is no governing body or regulation that requires this timeline.

The 30-day period is a public noticing requirement pursuant to California Health and Safety Code Section 40725. This is not a public commenting requirement, rather it is a requirement that a notice of the time and place of a public hearing to adopt, amend, or repeal any rule or regulation shall be given not less than 30 days prior to thereto. Subpart (c) of this section of the health and safety code requires that the notice invite written public comment, but does not require a specific comment time period.

The 45-day period is a public noticing requirement for the Air Resources Board (ARB), not the San Joaquin Valley Air Pollution Control District. The 45-day public noticing requirement is related to public hearings at ARB for the adoption, amendment, or repeal of a regulation. For more information about this refer to the California Government Code 11346.4.

21. COMMENT: The District should consider having technical workgroup meetings with the District in addition to the scheduled public workshops. There are concerns that the timeline for this plan does not allow sufficient time for public involvement. **(SCGC)**

RESPONSE: The District welcomes public participation, including technical input, throughout this public process and encourages stakeholders to submit information to us for consideration and review while drafting this plan. The District has been actively involved in a modeling technical workgroup that includes technical staff from ARB and

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EPA, and researchers with expertise in PM_{2.5}. The District and ARB hosted a public technical symposium on April 27th that included panel presentations on a range of technical issues relevant to development of the *2012 PM_{2.5} Plan*. In addition to the April workshop, the District anticipates holding additional workshops in June and August. The plan would be considered by the Governing Board at a public hearing October 2012 after multiple opportunities for public input.

22. COMMENT: What is the Clean Air Vision document, and when will it be available to the public? **(SCGC)**

RESPONSE: The *Vision for Clean Air: 2012 to 2050* is an interagency policy collaboration will outlining a common ARB, South Coast, and Valley vision for strategies to meet federal air quality standards for ozone and PM_{2.5}, the State's greenhouse gas goals, and reduced public exposure to toxics (such as diesel particulates). Meeting these long-term goals will depend on introduction and deployment of transformative measures and emerging technologies, including zero-emissions goods movement. Thus, the *Vision* document will evaluate potential policies, legislation, infrastructure, and efficiencies that might provide the groundwork for ensuring that South Coast, the Valley, and California as a whole are prepared to meet the demands of long-term goals. This is to be the starting point for identifying actions that need to begin in the short-term. These actions can also contribute to the more near-term air quality needs – including the *2012 PM_{2.5} Plan* – as well. ARB anticipates taking this document to their Board in June 2012. The document will be posted for public review before this meeting.

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WRITTEN COMMENTS, APRIL 30, 2012 WORKSHOP

One comment letter was received during the public comment period following the first public workshop on April 30, 2012. This comment letter was submitted by the following stakeholders, and for purposes of this plan will be referred to as the "Ag Coalition" (AC). The following groups are represented in the AC comment letter: Air Coalition Team, Allied Grape Growers, California African American Farmers Association, California Blueberry Association, California Citrus Mutual, California Cotton Ginners Association, California Cotton Growers Association, California Grape and Tree Fruit League, California Farm Bureau Federation, Fresno County Farm Bureau, Kings County Farm Bureau, Madera County Farm Bureau, Merced County Farm Bureau, Milk Producers Council of California, Nisei Farmers League, San Joaquin Farm Bureau Federation, Stanislaus County Farm Bureau, Tulare County Farm Bureau, Tulare Lake Basin Water Storage District, Tulare Lake Drainage District, Tulare Lake Resource Conservation District, and Western Agricultural Processors Association.

23. COMMENT: The agricultural industry has made huge strides in the past few years in reducing emissions of NOx and PM2.5 through the replacement and control of engines used for irrigation pumping, tractors, forklifts, harvesters and trucks. These emissions must be quantified and accounted for in this plan. There is currently an effort to formalize this concept in the form of a Memorandum of Understanding (MOU) and would provide a formal mechanism by which to quantify and account for these emission reductions. The emissions inventory should also be updated with the emission reductions resulting from the implementation of the USDA NRCS Environmental Quality Incentive Program (EQIP) and Conservation Innovation Grant Program (CIGb). **(AC)**

RESPONSE: Please refer to the response to Comment 11 from the verbal comments received during the first public workshop dated April 30, 2012.

24. COMMENT: The District's draft emissions inventory shows an increase in directly emitted PM2.5 emissions from farming operations which utilizes data derived from County Ag Commissioners reports that are based upon "harvested" acreage. This is in direct conflict with a previously accepted annual acreage reduction from the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP). The FMMP data is based on actual planted acreage which more accurately reflects true agricultural land use for emissions inventory planning purposes. We urge the District to work with the Air Resources Board to rectify the emissions inventory for agricultural sources, and demonstrate the actual reduction in agricultural land. **(AC)**

RESPONSE: Please refer to the response to Comment 12 from the verbal comments received during the first public workshop dated April 30, 2012.

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25. COMMENT: Significant research on PM_{2.5} emissions from agricultural sources should be incorporated wherever and whenever possible. This includes research that has been conducted on cotton gin emissions under the USDA Agricultural Research Service's (ARS) multi-year study known as "Characterization of Cotton Gin Particulate Matter Emissions." While the sampling phase is over, data analysis is also nearing completion and preliminary data is forthcoming, which indicate that PM_{2.5} emissions from a cotton gin would be insignificant. Furthermore, there has been significant work in almond harvesting operations which report PM_{2.5} emissions to be an insignificant portion of total suspended particulate (TSP) emissions. **(AC)**

RESPONSE: Please refer to the response to Comment 10 from the verbal comments received during the first public workshop dated April 30, 2012.

26. COMMENT: For purposes of focusing emissions on sources that operate during the "winter time" (November through April), the current characterization can be misleading and causes sources to be regulated that may not impact the current exceedances of the PM_{2.5} ambient air quality standard. The SIP should clearly identify the actual seasonal variances since seasonal, episodic, regional measures and incentive funding can strategically target limited resources for optimum air quality benefits throughout the Valley. **(AC)**

RESPONSE: Through the Risk-based Strategy, the District places an emphasis on winter time emissions in the emission reduction efforts presented in this plan because they are most impactful on achieving attainment of the federal air quality standards. However, the Risk-based Strategy has additional components to consider (such as toxicity of pollutants) and therefore the District is seeking to reduce all emissions in the Valley as expeditiously as practicable to benefit the health of its residents. Please refer to chapter two of the plan for a more detailed discussion about the Risk-based Strategy.

27. COMMENT: There is one technical error that needs to be corrected in the 3rd paragraph on page C-22 where the District indicates that new tractor equipment can be up to 25% of the existing tractor's horsepower to be eligible. That should be up to "125%". **(AC)**

RESPONSE: The technical error will be corrected in the next draft of the plan.

28. COMMENT: The District should expand the discussion regarding the contribution of PM_{2.5} from gross polluting vehicles and direct resources towards gross polluting on-road vehicles, and towards enforcement ensuring that all vehicles are registered in the

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District. After all, vehicle registration fees are a major source of incentive funding for the Valley Air Basin. **(AC)**

RESPONSE: The District intends to expand discussions regarding mobile sources throughout the public process of the development of this plan. Refer to Appendix C for more details and updated language throughout the process.

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WRITTEN COMMENTS, AFTER APRIL 30, 2012 WORKSHOP DEADLINE

One public comment letter was submitted to the District after the public comment period concluded.

Southern California Gas Company (SCGC)

29. COMMENT: California's innovative and robust energy-efficiency programs have resulted in a 24% reduction of natural gas use per customer since 1990. We would like to work with the District and CARB to ensure the PM2.5 Plan accurately reflects the energy-efficiency savings and the proper natural-gas usage forecasts. **(SCGC)**

RESPONSE: Chapter 7 of the *2012 PM2.5 Plan* will be the chapter that discusses the energy efficiency strategies generally as potential policy initiatives and innovative opportunities. In any future work to refine innovative strategies regarding usage forecasts, the District will work with stakeholders to determine the most accurate and reliable usage forecasts. The District looks forward to receiving submittal of data to assist us with this process.

30. COMMENT: We would like to discuss the advances and potentials for natural-gas technology, especially for natural-gas vehicles, to ensure that the natural-gas vehicle-penetration rates and associated emissions benefits are accurately reflected in the PM2.5 Plan. **(SCGC)**

RESPONSE: The District appreciates and looks forward for the opportunity to discuss advances and potential in natural gas technology. Incentive strategies and technology advancement are important components to the District's attainment strategy. The *2012 PM2.5 Plan* addresses mobile sources in Appendix C. Refer to that appendix current for discussions regarding advances for mobile sources.