



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

GOVERNING BOARD

Chris Vierra, Chair
Councilmember, City of Ceres

Tony Barba, Vice Chair
Supervisor, Kings County

Judith G. Case
Supervisor, Fresno County

Ronn Dominici
Supervisor, Madera County

Henry Jay Forman, Ph.D.
Appointed by Governor

Michael G. Nelson
Supervisor, Merced County

William O'Brien
Supervisor, Stanislaus County

Leroy Ornellas
Supervisor, San Joaquin County

John G. Telles, M.D.
Appointed by Governor

Raymond A. Watson
Supervisor, Kern County

J. Steven Worthley
Supervisor, Tulare County

Vacant
Large City

Vacant
Large City

Vacant
Small City, Central Region

Vacant
Small City, Southern Region

Seyed Sadredin
Executive Director
Air Pollution Control Officer

Northern Region Office
4800 Enterprise Way
Modesto, CA 95356-8718
(209) 557-6400 • FAX (209) 557-6475

Central Region Office
1990 East Gettysburg Avenue
Fresno, CA 93726-0244
(559) 230-6000 • FAX (559) 230-6061

Southern Region Office
34946 Flyover Court
Bakersfield, CA 93308-9725
(661) 392-5500 • FAX (661) 392-5585

www.valleyair.org

DATE: August 20, 2009

TO: SJVUAPCD Governing Board

FROM: Seyed Sadredin, Executive Director/APCO

RE: **REVIEW AND ASSESSMENT OF THE DISTRICT'S BUDGET AND SPENDING, FUNDED BY WILLIAM AND FLORA HEWLETT FOUNDATION**

BACKGROUND:

The Sierra Nevada Air Quality Group (an environmental consulting firm) has been invited to present the findings and recommendations from their recent review and assessment of the District's budget and spending. The review was funded by the William and Flora Hewlett Foundation to assist the Central Valley Air Quality (CVAQ) Coalition, a partnership of more than 70 community, medical, public health, environmental, and environmental justice organizations in the San Joaquin Valley. Kathryn Phillips, Director, California Transportation and Air Initiative for the Environmental Defense Fund, served as the project manager for this review.

The basic study approach was to evaluate the San Joaquin Valley APCD's budget (revenue and expenditures) on its own merits and in the context of benchmarks established by the study's authors. For comparison purposes the District's performance was compared with four other California air districts. The budget and staffing level for each district are reported by the consultant to be as follows:

Air District	Total 2008-09 Budget in Millions	Staffing
South Coast AQMD	\$229.23	839
Bay Area AQMD	\$167.89	363
San Joaquin Valley APCD	\$137.04	310
Sacramento AQMD	\$31.39	104
Ventura County APCD	\$13.07	53

In performing this review, the consultant developed several benchmarks that were used in comparing the Valley District to the other four districts. The following table summarizes the report's findings with respect to each benchmark.

Summary of Performance Benchmarks

Benchmark	Other 4 Districts Average	Valley District	District Staff Observation
Cost of Control (Salaries and benefits costs per ton of reductions from stationary sources)	\$23,258	\$5,571	Valley Air District is 76% better than the average.
Inspections per Inspector	268	309	Valley Air District is 15% more productive than the average.
Management and Administrative Cost as a percentage of operating budget (includes costs for management, accounting, IT services, personnel, payroll, clerical support)	13.1%	10.4%	Valley Air District's "overhead" is 21% less than the average.
Public Outreach Per Capita Funding	\$0.75	\$0.50	Valley Air District spends \$.25 less per capita than the average.
Public Outreach Qualitative Assessment Score for General Outreach (Max. possible Score=5)	4	4	Valley District's performance is in line with others despite lower per capita expenditure.
Public Outreach Qualitative Assessment Score for Website (Max. possible Score=5)	3.9	4.5	Valley District's performance is better than average despite lower per capita expenditure.
Carl Moyer Grant Program Cost Effectiveness (Dollars spent per ton of reductions)	\$2,900	\$2,100	Valley Air District's program is 26% more cost effective than the average.

DISCUSSION:

The following discussion outlines the report's findings as developed by the consultant. While the District appreciates the high marks given to the Valley Air District's performance, for each benchmark a discussion of other pertinent factors is presented under "District Observations". In our opinion, these are important factors that should be incorporated and their thoughtful consideration in the report would lead to an even higher ranking of the District than reported.

Out of respect for the other districts that were considered in this review, the consultant went to great lengths not to identify them by name. Accordingly, at the request of the consultant and out of respect for the other districts, we also do not identify the other districts in the following discussion.

General Budget Observations:

The report acknowledges that the San Joaquin Valley APCD is the largest air district in California in terms of geographical size, covering a land area of 23,490 square miles, an area larger than a number of states. The report also acknowledges the enormous air quality challenges that are faced by the District and the progress that has been made. The report acknowledges that in the last four years the District's share of incentive grant funding has increased by over 1,000 percent. These incentive funds, also referred to as the non-operating budget, now make up nearly three quarters of the District's budget. With this enormous increase in incentive funding, the District's total 2008-09 budget was approximately \$137 million. At \$35.32 per resident, this represented the highest level of per capita funding amongst the air districts examined in this report. Despite this major increase in grant funding, the consultant reports that during the same period the District's staffing level only increased by 14%.

Benchmark 1 - Stationary Source Control Cost Effectiveness:

Benchmark number 1 is a quantitative measure of a district's expenditures for stationary source control per ton of emissions controlled (the sum of ROG, NOx, and PM2.5) during the four-year period from 2006 through 2009. The salaries and benefits portion of the districts' budgets that were attributed to stationary source control programs constituted the cost of control for this benchmark.

The consultant reports that the average or mean cost per ton of emissions reduced for the four comparison districts was \$23,258 per ton and the cost for the San Joaquin Valley APCD was \$5,571 per ton, or 76 percent better than the four-district average.

District Observations: *The consultant's assessment shows that the Valley Air District has one of the most cost effective stationary source control programs. However, without any further analysis a statement is included in the report that could be seen as an attempt to potentially minimize the District's high marks in this area. The report*

states that it is "possible that the District's stationary source control program had cost advantages because more favorable opportunities for control were available (that is, opportunities for easier, cheaper controls)." An objective analysis would indicate there are two reasons behind the District's exceptional performance with respect to this benchmark. One is the District's operational efficiency and the other is the tough rules that have been adopted by the District's Governing Board. Many District rules were third and fourth generation rules applied to the same category of sources and, therefore, reductions cannot be attributed to "opportunities for easier, cheaper controls". Several independent assessments, including one by the California Air Resources Board reported that the District's rules and regulations were among the most stringent in the state.

Benchmark 2 - Inspections per Inspector:

Benchmark number 2, the number of facility inspections carried out on an annual basis by district inspectors, provides a measure of the efficiency of a key component of an air district's compliance program. This benchmark looks at the number of facilities inspected annually in each of the five districts.

The consultant reports that the San Joaquin Valley APCD's inspection ratios were consistently the second highest among the districts studied. For the study period, the Valley Air District was 15% more productive than the average.

District Observations: *The District's productivity is impressive given the large geographic area covered by the District and the long distance travel that is required in the Valley. A more appropriate number to use for counting inspections, however, would be the number of devices inspected rather than the number of facilities as used in this report. The number of devices inspected is more indicative of the workload that is involved. Otherwise, inspecting an oil production facility with hundreds of devices would count as only one inspection and be given the same weight as inspecting a small facility with only one device. This is especially true given the Valley's unique definition of facilities, where a number of facilities that would count as multiple facilities in the other districts, would only count as one in the Valley. We suggested that the number of devices be used, but the consultant could not accommodate this request since some of the other districts in this review did not track the number of devices inspected. The District would have the highest inspection efficiency if the number of devices inspected had been used.*

Benchmark 3 - Management and Overhead Costs:

Benchmark number 3 provides a measure of the cost-efficiency of managing and administering the San Joaquin Valley APCD program for the five budget years studied. This benchmark compares the costs of the executive office, top-level managers, and administrative support activities (such as fiscal, clerical, and information services) with operating program costs for each district.

The consultant reports that in the four years for which complete data exists, the San Joaquin Valley APCD's management and administrative costs as a percentage of the total operating budget have been lower than the average or mean costs for the other four districts. In fact, for the latest budget year reviewed (2008-09), the consultant reports that at 10.1%, the District's overhead was 26% below the other districts average.

District Observations: *The District appreciates the finding that the Valley Air District has one of the lowest overhead rates calculated in this report. However, we believe that a more careful assessment would actually show that the District has the lowest overhead rate. The consultant reports that two districts had slightly lower overhead costs than the Valley Air District. District D is reported to have an overhead rate of 9.6%, and the District C is reported to have an overhead rate of 8% compared to the Valley Air District's overhead rate of 10.1% for 2008-09. Similar overhead rates are reported for the other four budget years examined. The study contains errors that if corrected, would show that the Valley Air District's overhead is in fact the lowest.*

First, District D utilizes a unique methodology in reporting their operating budget. The consultant's methodology required that the operating budget figures exclude pass-through funds (e.g., incentive grants). The figures used for District D's operating budget erroneously include pass-through funds. Therefore, District D's actual operating budgets are significantly lower than those reported and used in consultant's calculations here. The consultant included some adjustments to the reported operating budgets, but their numbers still include millions of dollars of pass through funds. Also, District D utilizes the County for their accounts payable at an annual cost of \$150,000. If these corrections are made District D's overhead will be higher than the calculated overhead rate for the Valley Air District.

The administrative and management costs used by the consultant for District C are much lower than those reported in the published budgets for District C. For instance, if the published budget figures for District C are used, for budget year 2008-09 the overhead rate for District C would at least be 11.3% to 13.7% even if management and clerical costs for specific programs such as permitting and compliance are ignored. Those costs were included for the Valley District in the consultant's calculated overhead rates.

Additionally, District A already reported to have the highest overhead rate, also utilizes the County for a number of administrative tasks including personnel, legal, payroll, fleets, purchasing, and general services. District A pays the County \$230,000 for these services. None of these costs were included in the consultant's calculation of District A's overhead rate. This correction, if made, will further increase the average overhead rate attributed to the other four air districts.

Another metric that can be used as a measure of overhead cost is the ratio of management and administrative personnel (i.e. management, legal, clerical, information technology, accounting and payroll, purchasing, fleets, maintenance) to total staffing. As illustrated below, the Valley Air District has the lowest management and administrative staffing ratio, even when compared with the districts that receive administrative support from their respective counties.

District B	39.50%
District D	27.90%
District C	27.00%
District A	24.50%
San Joaquin Valley APCD	22.90%

Regardless of which metric is used, the District's low overhead is even more remarkable when considering the geographic size of the District. At 23,490 square miles, the Valley Air District is larger than a number of states and is the largest air district in the state. To provide adequate service, this requires that the District maintain three offices. Having three offices demands added administrative and management resources. Despite that, the District has one of the lowest overhead costs throughout the state.

The consultant's methodology also did not consider the districts' total budget. It only focused on the operating budgets in calculating overhead rate for this benchmark. For the Valley Air District, nearly 75% of the budget is made up of incentive funds that require significant administration and management resources.

Benchmark 4 - Public Outreach:

Benchmark number 4 has both quantitative and qualitative aspects. The consultant reports that the San Joaquin Valley APCD public outreach expenditures were between \$.50 and \$.52 per person for the final four years of the study. During the same time period, the average expenditure by the other four districts averaged from \$.62 to \$.75.

As for the qualitative benchmarks, the study looked at a number of factors for general outreach and the Valley Air District was given a score of 4 out of 5. For its website the Valley Air District received a score of 4.5 out of 5.

The report recommends that the District examine the Bay Area AQMD and Sacramento Metropolitan AQMD's teacher training programs to expand its current pilot program. The report also points out the need for quantifying air quality benefits achieved from public outreach.

District Observations: *We are pleased with the report's findings that show that despite a lower expenditure per capita, the Valley Air District ranks high when it comes*

to the qualitative benchmarks that were examined. Unfortunately, it appears that a number of public education efforts implemented by the District were overlooked in the initial report. After these oversights were pointed out by the District, the consultant published an errata sheet to address those findings and removed their recommendation with respect to the teachers training program.

With respect to the recommendation relating to the teachers training programs, it appears that the consultant initially missed the significant efforts and programs that the District has implemented in this area. The District has two very robust, long-running school curriculum programs, neither of which is a "pilot program". The first is an identical program to one at the Bay Area. Like the Bay Area, the Valley Air District also contracts with Enterprise for Education to provide training to high school teachers. The District has paid for 332 teachers to go through the Clean Air Challenge training during the past four years resulting in approximately 40,000 students being exposed to the program. It should be noted that these achievement rates are greater than those reported by the consultant for their recommended Bay Area program.

Furthermore, the Valley Air District is the only district which has provided a California standards-based elementary school curriculum to teachers. The Blue Sky, Brown Sky: It's Up to You Curriculum (including teacher's manual, student workbooks, pencils, crayons and stickers) has been distributed to 6,222 students throughout the Valley at a cost of \$12,000 per year. The District is currently working with an outside vendor to produce the third edition of this curriculum.

Both of these curricula are offered free to schools and teachers.

Additionally, the District has offered, in collaboration with California State University at Fresno, a Certificate Award in Air Quality Management (non-credit). The course covered the science behind air pollution; the social, health, and economic implications of air pollution; and how plans for cleaning the air are developed, implemented and enforced.

The consultant also failed to note the District's comprehensive Healthy Air Living Initiative. In the most comprehensive program rollout in District history, the Healthy Air Living Initiative (HAL) was developed in 2008 to expedite the air basin's progress toward meeting health-based air-quality standards. The philosophy behind the initiative is that every sector of the Valley's population can contribute to clean-air goals by making behavioral changes that are feasible and permanent. To accomplish this broad-based participation, the District has developed and enhanced programs tailored to specific segments of the Valley's populace.

The program kick-off in summer 2008 accompanied a massive, multilingual media and public outreach campaign. Beginning with Healthy Air Living Week in July, the District embarked on a slate of seasonal and year-round events and activities designed to elicit

the support of private citizens, business and industry, faith-based organizations and schools. In every season and virtually every month of 2008-09, the District has conducted broad-based outreach campaigns that complemented the objectives of Healthy Air Living.

The District leveraged the Healthy Air Living program with highly successful long-standing District programs such as Check Before You Burn (the public campaign component of the landmark residential wood-burning regulation) and the evergreen Clean Green Yard Machines lawn mower trade-in event. Furthermore, in 2008 the District unveiled a massive school-based pledge card program that resulted in gathering 7,455 pledge cards from fourth- and fifth-grade classrooms throughout the eight-county air basin.

The Healthy Air Living initiative maximized the reach of these programs and was directly linked to the 2008-09 particulates season being one of the cleanest on record.

Over the past two summers, the District has also hosted business summits in each of the three regions; dozens of public meetings; and is embarking on its second annual hybrid vehicle giveaway, which requires the submission of a personal pledge card for entry.

The District consistently demonstrates its pioneering approach not only in its regulatory undertakings but also in successful outreach to arguably the most diverse population in the country.

The District did prepare a comprehensive and detailed technical report quantifying the air quality benefit achieved from the District's public outreach efforts during the winter season of 2008-09. This report quantified significant daily improvements in air quality and PM2.5 concentrations that resulted from the District's public outreach activities.

Benchmark 5 - Carl Moyer Administration:

Benchmark number 5 evaluates several performance measures of the effectiveness and efficiency of the San Joaquin Valley APCD's administration of the Carl Moyer Program. The consultant report acknowledges that the Valley Air District has consolidated the administration of all its grant incentive programs, including Carl Moyer program, under a single organizational unit, the "Emission Reduction Incentive Program Group." The other incentive programs administered by the San Joaquin Valley APCD are Proposition 1B grants (Goods Movement Emissions Reductions and School Bus Replacement), REMOVE II (which funds cleaner light duty vehicles and transportation alternatives), a wood stove change-out program, and the "Clean Green Yard Machine" program (which replaces gas-powered lawnmowers with electric lawnmowers).

The report relies on recent audits by the state of California that gave high marks to the Valley Air District. The report states that the ARB characterized the San Joaquin Valley APCD's Carl Moyer program as "a strong and robust program that for the most part meets the requirements of the Health & Safety Code and the applicable (ARB) Guidelines."

In relation to program cost effectiveness, the consultant reports that the average cost-effectiveness of the other four air districts for projects completed through FY 2005-06 was \$2,900 per ton of NOx reduced, while the cost effectiveness of San Joaquin Valley APCD projects was \$2,100 per ton.

Another benchmark that was examined is the share of emissions reduced by the projects funded. The report finds that the average share of Carl Moyer emissions reduced by the Carl Moyer Program for the other four districts was 1.43 percent, while the San Joaquin Valley APCD share was 1.21 percent. Of course this is not a reflection on the District's performance, rather it highlights the need for additional state funding for the Carl Moyer Grant Program.

CONSULTANT RECOMMENDATIONS:

With respect to specific recommendations, the consultant states the following:

"Although the benchmark analysis shows that the San Joaquin Valley APCD is spending its budget resources as effectively as the other air districts studied, the project team believes there are still opportunities for improvement and makes the following recommendations:"

1. **"The District should continue to aggressively pursue state and federal funding to reduce motor vehicle emissions in its jurisdiction. This appears to be a major strength of the District in that it provides the resources to reduce on-road and off-road mobile source emissions and thereby make more progress toward improved air quality. "**

District Response: Securing incentive funds to expedite reductions emissions will remain a top priority for the District given the Valley's unique circumstance, enormous needs, and difficult air quality challenges. The District will continue successful efforts that yielded a 1000% increase in incentive funds over the last four years. It is hoped that the sponsors of this report will also embrace this recommendation and join the District in efforts to secure funding.

2. **"The public outreach program spends about \$0.50 per capita out of a total budget of \$35 per capita, or less than 2 percent of the total District budget. In contrast, the district spending the most on public outreach expends \$1.34 per capita out of a total budget of \$22 per capita, or 6 percent of that district's total**

budget. This difference in spending levels should be examined further. However, before any major increase to the District's public outreach program, a careful analysis is needed to determine the benefits, particularly in terms of additional emission reductions that could result from various levels of increased funding for outreach. Finally, the incentive budget may lend some opportunities to increase the public outreach efforts."

District Response: Through Healthy Air Living initiative, the District has made a major commitment to public outreach and education. The District believes that effective public participation and action must supplement the District's strong regulatory programs. As in the past, the public outreach strategies and expenditures will be guided by sound science and reliable means measure outcome.

- 3. "One deficient area of the District's website is access to permit information on-line. The District should examine the South Coast AQMD's FIND program to see whether a similar database could be established. Regular publication of NOVs and Mutual Settlements on the website should also be considered."**

District Response: The District already provides members of the public and regulated facilities reliable access to permit and enforcement statistics and information. Nonetheless, the District has been working on and has made significant progress in designing and incorporating in its web site a program similar to the above referenced "FIND" program.

- 4. "The Teacher Training Program is an important tool of an air pollution control agency. We recommend the District examine the Bay Area AQMD and Sacramento Metropolitan AQMD teacher training programs to expand its current pilot program."**

District Response: The consultant has now removed this recommendation. The District already has a well established and effective program identical to that initially recommended by the consultant.

- 5. "The San Joaquin Valley APCD should regularly review the funding levels for its various programs and determine whether any changes in budget priorities might result in programs that are more effective, more cost-efficient emissions reductions and more rapid attainment of health-based air quality standards."**

District Response: Of course. The District engages in this exercise not only during the annual budget preparation effort, but also on an ongoing basis. For instance, the District was able to come into attainment with the federal PM10 standard nearly seven years ahead of the regulatory deadline. The District also adopted a dual path strategy to meet the federal ambient air quality standards in a more expeditious fashion. The dual path also includes a set of strategies to reduce or eliminate the

"black box" as expeditiously as possible, and well in advance of the 2024 attainment deadline for ozone. The District has adopted the term "Fast Track" to describe this accelerated path to attainment. The Fast Track is being developed in an open public process. The Air Pollution Control Officer (APCO) has formed a task force comprised of members from environmental organizations, industry groups, and the Governor's San Joaquin Valley Partnership to identify and help develop and implement a number of fast track measures.

DISTRICT CONCLUSIONS:

Once again, it is gratifying to receive high marks by an outside entity reviewing the District's operations and performance. It is worth noting that the sponsors of the study have been avid critics of the District's Governing Board for a long time. According to Ms. Phillips, the project manager in this case, they were given the opportunity to review and edit the report as it was being prepared. The same courtesy was not extended to the District. The consultant in this case is a reputable firm with impeccable credentials. They have assured me that they maintained objectivity throughout this project. In my opinion, however, a number of editorial comments did make their way into this report that tend to downplay or minimize the Valley Air District's good performance. Also the report could do more to accentuate examples of good performance by the District. Having said that, an objective examination of the quantitative and qualitative benchmarks developed by the consultant show that your Board has exercised great stewardship of public funds in pursuing our public health mission, as summarized below:

- With extensive efforts focused on educating the state and federal legislature, the Valley District now receives the highest per capita incentive funding for emission reduction projects. A ten-fold increase in funding in the last four years.
- With three quarters of the District's budget made up of incentive grants, the Valley District devotes the highest per capita resources to air quality, a major public health concern.
- The Valley District has one of the most cost-effective air pollution control programs for stationary sources.
- The Valley District has one of the most efficient facility inspection programs.
- The Valley District has one of the lowest, if not the lowest, administrative overhead rates.
- The Valley District has one of the most active and effective public education and outreach programs despite spending less per capita.
- The Valley District has one of the most cost-effective and robust grant management programs.