

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

REQUEST FOR PROPOSAL

The District is seeking a qualified contractor to analyze Photochemical Assessment Monitoring Stations (PAMS) data collected by the San Joaquin Valley Unified Air Pollution Control District.

Submittal: Five (5) copies of the proposal must be received at the address below on or before:

Monday, July 28, 2008 – 5:00 PM

PROPOSALS RECEIVED AFTER THE TIME AND DATE STATED ABOVE WILL NOT BE ACCEPTED.

Address to: Gary Arcemont, P. E.
Senior Air Quality Specialist
San Joaquin Valley Unified Air Pollution Control District
1990 East Gettysburg Avenue
Fresno, CA 93726

Mark Envelope: "PROPOSAL – PAMS Data Analysis"

Issuance Date: July 8, 2008

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1.0 OVERVIEW

Air pollution control programs operate an air monitoring network to collect ambient air quality and meteorological data. The principal reasons for the collection of ambient air pollutant and meteorological data are the lack of attainment of the National Ambient Air Quality Standard (NAAQS) for ozone nationwide, and the need for a more comprehensive air quality database for ozone and its precursors.

The Environmental Protection Agency (EPA) has promulgated rules for the enhanced monitoring of ozone, oxides of nitrogen (NO_x), and volatile organic compounds (VOC) to obtain more comprehensive and representative data on ozone air pollution. Immediately following the promulgation of such rules, the affected States were to commence such actions as were necessary to adopt and implement a program to improve ambient monitoring activities and the monitoring of emissions of NO_x and VOC. Each State Implementation Plan (SIP) for the affected areas must contain measures to implement the ambient monitoring of such air pollutants. The subsequent revisions to Title 40, Code of Federal Regulations, Part 58 (40 CFR 58) required States to establish Photochemical Assessment Monitoring Stations (PAMS) as part of their SIP monitoring networks in ozone nonattainment areas classified as serious, severe, or extreme.

The chief objective of the enhanced ozone monitoring revisions is to provide an air quality database that will assist air pollution control agencies in evaluating, tracking the progress of, and, if necessary, refining control strategies for attaining the ozone NAAQS. Ambient concentrations of ozone and ozone precursors will be used to make attainment/nonattainment decisions, aid in tracking VOC and NO_x emission inventory reductions, better characterize the nature and extent of the ozone problem, and prepare air quality trends. In addition, data from the PAMS will provide an improved database for evaluating photochemical model performance, especially for future control strategy mid-course corrections as part of the continuing air quality management process. The data will be particularly useful to States in ensuring the implementation of the most cost-effective regulatory controls. Parts of the prior discussion were obtained from the EPA PAMS website, <http://www.epa.gov/air/oaqps/pams/>. For more detail on the PAMS program, please refer to this website.

The San Joaquin Valley Unified Air Pollution Control District (District) is seeking a qualified contractor to analyze data collected by the PAMS program with the goal of answering technical questions that will aid the District in attaining the NAAQS. The contractor will produce a technical report summarizing the findings. This project will be completed by April 2009, so that the District can submit the information to EPA by the required deadline.

2.0 BACKGROUND

This Request For Proposal (RFP) solicits proposals to provide the District with a thorough technical evaluation and analysis of PAMS data as required by EPA. Successful respondents to this RFP will have demonstrated proficiency in preparing such evaluations or similar work. The analysis will spatially cover the District's jurisdiction which includes the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, and the western and central portions of Kern. The following table lists the District's PAMS network sites, which are segmented into two Metropolitan Statistical Areas (MSAs) within the District.

PAMS Network Monitoring Stations

	Fresno Metropolitan Statistical Area	Bakersfield Metropolitan Statistical Area
Type 1 Site	Madera – Pump Yard AIRS code 060390004	Shafter – Walker AIRS code 060296001
Type 2 Site	Clovis – Villa AIRS code 060195001	Bakersfield – Golden State AIRS code 060290010
Type 3 Site	Parlier AIRS code 060194001	Arvin AIRS code 060295001

3.0 SCOPE OF WORK

The contractor will perform the analysis using all PAMS data from the start of the program (1994) through 2007. The contractor will obtain the data set for the analysis from the EPA AIRS database. This technical data assessment will include a list of PAMS species and present the following information:

- Sources of the measured species;
- Reactions that produce these species;
- Ozone forming potential of species and the role in formation of ozone;
- An examination of PAMS species that are expected to be in higher concentrations at upwind, city center and downwind PAMS stations;
- Concentrations of measured PAMS species at all San Joaquin Valley stations for the complete PAMS monitoring period;
- Trend analysis of PAMS compounds;
- Evaluation and discussion of probable reasons for trends (controls on these species or other reactive species?)
- An examination of how PAMS species trends tracked with ozone trends and any potential correlation;
- Discussion of species reduction impacts on hydrocarbon and NO_x limited photochemical environments; and

- Identification of PAMS species that could be controlled for significant benefits in ozone concentrations and discussion of why the indicated species would be expected to provide greater value to ozone reduction than to reductions of other species.

The contractor will also evaluate the following specific technical issues:

1. Characterize potential sources of the emissions in the San Joaquin Valley, based on PAMS data. Are characteristics of mobile sources, confined animal feeding operations, combustion, chemical solvents, industrial processes, and other sources identifiable by an analysis of the PAMS data? Is it possible to link PAMS data to emissions sources so that site/source-specific controls could be applied to larger sources of emissions on critical days?
2. Examine ozone forming potential and volatility for the compounds measured in the PAMS program. Examine compound speciation and variations in concentrations to determine how long VOC's remain in the airshed and how they react with other compounds. The goal of this analysis is to determine whether there is a benefit from switching to the less-volatile VOC or VOC's with less ozone forming potential, so that the District will have the technical data to evaluate rule modification.
3. Examine variations in PAMS compounds by hour, by elevation, and weekend vs. weekday.
4. Examine trends in reactivity by year and by PAMS Metropolitan Statistical Areas (Fresno and Bakersfield).
5. Examine NMOC/NO_x and VOC/NO_x ratios by year and by PAMS Metropolitan Statistical Areas (Fresno and Bakersfield).
6. Examine ratios of PAMS compounds by year and by PAMS monitoring period (0500-0800, 1200-1500, 1600-1900, 2300-0200) and by PAMS Metropolitan Statistical Areas (Fresno and Bakersfield).
7. Examine data for PAMS 'episode' days. Are there any significant differences in the data between PAMS monitoring data on 'trend' days and 'episode' days? Are there any unique features of the 'episode' day data? Are certain PAMS parameters higher on 'episode' days? PAMS 'Trend' days are defined by the routine PAMS monitoring schedule. PAMS 'Episode' days are defined by the extended PAMS monitoring schedule which occurs during significant ozone episodes.
8. Examine trends in ozone precursor compounds.
9. Present background concentrations for all PAMS compounds by location.

10. Identify toxic compounds. Present trends in risk parameters (temporal and spatial) for toxic compounds.

11. Evaluate other technical issues as required by the District or EPA guidance that may arise during the course of the project.

The Contractor will prepare and submit a report that describes the project approach and methodology and presents the results. The executive summary of the report shall contain a table summarizing key findings. The report shall present all methodologies, calculations, and assumptions critical to the development of conclusions about PAMS data. Include justification for making any assumptions. Calculations should be completely documented. The District requires that the technical writing be adequate to clearly explain the process used to develop the assessment. Multiple report revisions may be required if the report is not written to the satisfaction of the District.

The contractor will provide the complete PAMS database that was used in the analysis in Microsoft Access format. Reports and databases produced by the contractor for this project must be submitted to the District in a format specified by the District using Microsoft Office 2000 Professional software (Word, Excel or Access).

4.0 WORK PRODUCTS/DELIVERABLES

4.1 INITIAL MEETING/CONFERENCE CALL: At the start of the contract period, the principal investigator and key personnel will meet with District staff via telephone or in person to discuss the overall plan, details of performing the tasks, the project schedule, items related to personnel or changes in personnel, and any issues that should be resolved before work can begin.

4.2 PERIODIC CONFERENCE CALL AND PROGRESS REPORTS: At regular intervals defined by the District (approximately every 2 weeks), the principal investigator and key personnel will meet with District staff via telephone to discuss the overall plan and details of task progress. Prior to the conference call (preferably at least one work day before), the contractor will email the District a brief progress report that includes:

- Brief summary of last meeting, including list of attendees
- Current status of work products and deliverables
- Action items (significant upcoming tasks)
- Action items in progress
- Action items completed

The District may request interim deliverables. Contractor must be willing to receive guidance and direction from the District and adjust methods based on preliminary results.

- 4.3 TECHNICAL ASSESSMENT OF PAMS DATA: The Contractor will evaluate the District's PAMS data as specified by EPA PAMS guidance and as defined in the scope of work of this RFP.
- 4.4 ELECTRONIC DATA SUBMITTAL: The contractor will provide the District with the complete final database used to perform the data evaluations for this project. The Contractor must provide the information in an electronic format fully readable by the applications contained in Microsoft Office 2000 Professional (Access or Excel).
- 4.5 REPORTS: The Contractor will prepare a draft final report and a final report. The executive summary of the reports shall contain a summary of the project. Supporting technical documents and calculations shall be included in the report as appendices.
- DRAFT FINAL REPORT: The Contractor will deliver to the District an electronic copy of a draft final report for review by staff. If the Draft report is not acceptable to the District it shall be returned to the contractor with indication of deficiencies to be corrected. When the Draft report is determined to be complete and ready for public review, a 30 day comment period will be established by formal release of the document. The District and Contractor will review public comments and discuss revisions required for the final report.
 - FINAL REPORT: Upon approval of the Final Report by the District, the Contractor will deliver to the District five bound copies and one unbound copy of the final report incorporating all final alterations, additions and appendices. The Contractor will also deliver an electronic copy of the final report produced in Microsoft Office 2000 Professional. The report shall also include a bibliography of data sources referenced or used to support the evaluation and completion of tasks. The District may request that a copy of these reference documents accompany the final report to provide complete documentation of the report.
- 4.6 INVOICES AND PROGRESS REPORTS: The Contractor will submit invoices in triplicate. The invoices must list the contract number and shall itemize all expenses incurred during the payment period completed. Each item in the invoice will correspond to one of the tasks. Direct labor charges and subcontractor and contractor charges shall be subdivided into number of hours spent by each staff classification (e.g., Senior Scientist, Research Assistant) for the invoice period.

The Contractor will be paid for the payment period when the invoice and a progress report are deemed by the District to reflect work done in accordance with the contract.

5.0 PROJECT TIMELINE AND SCHEDULE OF DELIVERABLES

The District may amend the following tentative timeline for completion of work products. The contractor may propose an alternative deliverable and payment schedule. Payments must correspond with deliverables.

TABLE 1
Proposed Schedule of Deliverables and Payments

Action/Work Product	Approximate Date	Percent of Payment
Release of RFP	July 8, 2008	
Proposal Deadline	July 28, 2008	
Contractor Selection	July-August 2008	
Contract Approval	August 2008	
Contract Signature	August 2008	
Contract Effective	August 2008	
Draft Report	February 2009	60%
Final Report	April 2009	40%

6.0 REQUIRED QUALIFICATIONS

The selected proponent shall have demonstrated extensive experience and expertise in the following areas:

- 6.1 PAMS data analysis and assessment;
- 6.2 Data compilation, access and manipulation;
- 6.3 Emission source evaluation using ambient monitoring data;
- 6.4 Assessment and characterization of atmospheric chemistry;
- 6.5 Excellent working relationships with government agencies;
- 6.6 Skill in preparing clear reports;
- 6.7 Excellent technical writing skills.

Contractor must demonstrate that the Contractor has the ability and resources to produce the deliverables requested in this RFP. The District reserves the right to reject any proposal deemed non-responsive to the Request for Proposals (RFP), not responsible, and/or not reasonable.

7.0 RESPONSE SUBMITTAL REQUIREMENTS

7.1 Contents of Proposal

Submitted proposals must follow the format outlined below and all requested information must be supplied. The submitted proposals shall be limited to 24 pages, single sided or 12 pages, double sided, with 1" margins. Proposals shall be printed on white paper and the font shall be black Arial and no smaller than 12 point. Failure to submit proposals in the required format may result in elimination from proposal evaluation.

- 7.1.1 COVER LETTER - Must include the name, address, and telephone number of the company, total project cost, the name of the contact person for the proposal, and be signed by the person or persons authorized to represent the firm. Submission of the proposal will be considered to be a binding commitment (firm offer) by the Contractor to provide the proposed services by the identified personnel at the specified cost.
- 7.1.2 TABLE OF CONTENTS - Clearly identify material contained in the proposal by section and page number.
- 7.1.3 SUMMARY (SECTION 1) - State the overall approach to the project and objective(s). Demonstrate a clear understanding of the project goal. Include total project cost. Provide specific examples of steps to be taken to complete the analysis, as well as measures to assure repeatability, reliability and applicability of data.
- 7.1.4 WORK PROGRAM (SECTION 2) - Describe work activities or tasks to be performed including the sequence of activities and a description of methodology or techniques to be used.
- 7.1.5 PROGRAM SCHEDULE (SECTION 3) - Provide projected milestones or benchmarks for major products/reports within the total time allowed.
- 7.1.6 PROJECT ORGANIZATION (SECTION 4) - Describe the proposed management structure, project monitoring procedures, organization of the contracting group, and facilities available.

- 7.1.7 ASSIGNED PERSONNEL (SECTION 5) - Identify the principals having primary responsibility for implementing the project. Discuss their professional and academic backgrounds. Provide a summary of similar work they have previously performed. List the amount of time, on a continuous basis, that each principal will spend on this project. Describe the responsibilities and capacity of the technical personnel involved. Substitution of the project manager and/or lead personnel will not be permitted without prior written approval of the District.
- 7.1.8 DISTRICT RESOURCES (SECTION 6) - Describe any District services and staff resources needed to supplement contractor activities to achieve identified objective(s).
- 7.1.9 SUBCONTRACTORS (SECTION 7) - If subcontractors are to be used, identify each of them in the proposal. Describe the work to be performed by them and the number of hours or the percentage of time they will devote to the project. Provide a list of their assigned staff, their qualifications, their relationship to project management, schedule, costs and hourly rates.
- 7.1.10 CONTRACTOR CAPABILITY AND REFERENCES (SECTION 8) - Provide a summary of the firm's relevant background experience. Discuss the applicability of background experience to this RFP. Include examples of related projects completed for other parties that are of a similar nature to the work requested herein.
- 7.1.11 COSTS OF PROPOSAL (SECTION 9) - Identify all costs associated with the execution of this RFP. Agreements established from the proposal are considered to be fixed price, including sales tax and other miscellaneous expenses.
- 7.1.12 CONFLICT OF INTEREST (SECTION 10) - Identify any actual or potential conflicts of interest resulting from any contractual work performed, or to be performed, for other clients, as well as any such work done, or to be done, by its proposed subcontractors. Specifically, proponents must disclose any recent or current contracts with the District, business entities regulated by the District, and/or any environmental or business interest group. In addition, proponents must disclose any contracts with the District, public or private entities, which are scheduled to be performed in the future, or which are currently under negotiation. The District will consider the nature and extent of such work in evaluating the proposal (see Section 9.0).

7.1.13 ADDITIONAL DATA (SECTION 11) - Attach a copy of any work prepared similar to what is requested in this RFP. Report samples will not be considered part of the twenty-four-page limitation set for the proposal. Provide other essential data that may assist in the evaluation of this proposal.

7.2 Proposal Submission

All proposals must be submitted according to the specifications set forth in Section 7.1 - "Contents of Proposal" and this section. Failure to adhere to these specifications may be cause for rejection of proposal.

7.2.1 Signature - all proposals shall be signed by an authorized representative of the proponent.

7.2.2 Due Date - The bidder shall submit five (5) complete hard copies of the proposal in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the proponent and the words:

“PROPOSAL - PAMS data analysis”

Proposals must be received at the address below, no later than 5:00 p.m. on July 28, 2008, and should be directed to:

Mr. Gary Arcemont, P. E.
Senior Air Quality Specialist
San Joaquin Valley Unified Air Pollution Control District
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244

Late proposals will not be accepted. Any correction or resubmission by the proponent will not extend the submittal due date.

The bidder shall also submit an electronic copy of the proposal in Microsoft Word (Microsoft Office 2000 Professional). The electronic copy shall be emailed to: gary.arcemont@valleyair.org

7.2.3 Addenda - The District may modify the proposal and/or issue supplementary information or guidelines relating to the RFP during the proposal preparation period.

7.2.4 Grounds For Rejection - A proposal may be immediately rejected if:

- It is received at any time after the exact due date and time set for receipt of proposals;

- It is not prepared in the format prescribed; or
- It is not signed by an individual authorized to represent the firm.

The District reserves the right to reject all proposals and make no awards.

7.2.5 Disposition of Proposals - All proposals become the property of the District.

7.2.6 Modification or Withdrawal - Once submitted, proposals, including the composition of the contracting team, cannot be altered without prior written consent of the District. All proposals shall constitute firm offers and may not be withdrawn for a period of ninety (90) days following the last day to accept proposals.

8.0 ESTIMATION OF COSTS

Costs must be itemized by the following categories:

- 8.1 Task – List a total cost per task. The District reserves the right to remove tasks as deemed necessary to remain within budget.
- 8.2 Labor - List an hourly labor rate for each assigned principal and technical specialist. The rate quoted must include labor, general, administrative, and overhead costs.
- 8.3 Supplies and Equipment - Provide an itemized list of supplies to be purchased or leased specifically for the program. The District will not pay for any equipment unless adequately justified. Any equipment paid for by the District will become the property of the District.
- 8.4 Subcontractor Costs - Identify subcontractors by name, list their cost per hour or per day, and the number of hours or days their services will be used.
- 8.5 Travel Costs - Identify estimated travel costs, including the number of trips required, destinations, and approximate costs of travel. Travel costs are reimbursed at prevailing rates for the contracting company or District rates, whichever is lower, unless negotiated otherwise.
- 8.6 Miscellaneous Costs - If any.

Total cost must be clearly indicated in the Costs of Proposal section of the proposal. It is expected that general overhead and administrative costs are included in the hourly rate for labor. It will be assumed that all contingencies and/or anticipated escalations are included. No additional funds will be paid above and beyond the original quote given by the selected proponent.

9.0 PROPOSAL EVALUATION AND CONTRACTOR SELECTION

District staff will evaluate all proposals to determine responsiveness to the RFP. Staff will recommend the selection of a contractor to District management who, in turn, will recommend to the Executive Director/Air Pollution Control District or District Governing Board for final approval and execution of a contract. Proposal evaluation criteria will include:

- Cost of proposal;
- Clarity and thoroughness of proposal;
- Presentation, including good organization and format and a minimum of grammatical errors;
- Thoroughness and appropriateness of proposed work program;
- Innovation in approach to work tasks;
- Previous experience with PAMS data evaluations;
- Working relationships with government agencies.

During the selection process, District staff may interview proponents with scores above a natural break, for clarification purposes only. No new material will be permitted at this time.

A contract will be awarded to the proponent with an acceptable proposal based on cost effectiveness and the criteria described in this section. The District may choose not to award this contract if submitted proposals are not deemed acceptable to the District. Failure to adhere to specifications in this Request For Proposal may be cause for rejection of the proposal.

The contract is subject to approval by the District Executive Director/Air Pollution Control Officer and the Governing Board. All proponents will be notified of the results by letter.

10.0 INSURANCE

The contractor shall provide insurance in coverage and amount acceptable to the District. The District will require that any contractor prior to endorsement of a contract meet the following insurance requirements for this project.

- 10.1 Without limiting District's right to obtain indemnification from Contractor or any third parties, Contractor, at its sole expense, shall maintain in full force and effect throughout the term of this Agreement the following insurance policy(s):
 - 10.1.1 Liability insurance for bodily injury, including automobile liability, with limits of coverage of not less than Five Hundred Thousand Dollars (\$500,000) each person and One Million Dollars (\$1,000,000) each occurrence; and
 - 10.1.2 Liability insurance for property damage with limits of coverage not less than Fifty Thousand Dollars (\$50,000) each occurrence; and
 - 10.1.3 Workers compensation insurance in accordance with the California Labor Code; and
 - 10.1.4 Commercial general liability insurance with minimum limits of coverage of not less than One Million Dollars (\$1,000,000) per occurrence.
- 10.2 The foregoing insurance policy(s) shall not be canceled, reduced, or changed without a minimum of thirty (30) calendar days advance, written notice given to District.
- 10.3 Prior to performing its obligations under this Agreement, Contractor shall provide District a certificate of insurance from an insurer acceptable to District evidencing proof of such insurance coverage required herein.

11.0 DATA OWNERSHIP

All data that is received, collected, produced, or developed by Contractor for completion of the Tasks shall become the exclusive property of the District. The Contractor shall be allowed to retain a copy of any nonconfidential data received, collected, produced, or developed by Contractor subject to District's exclusive ownership rights.

12.0 INQUIRIES

Technical and administrative questions concerning this RFP should be directed to Gary Arcemont, San Joaquin Valley Unified Air Pollution Control District at (559) 230-5800.

13.0 CONFIDENTIAL INFORMATION

All responsible proposals received by the District are public records and will be available for review by the public after the selection process is completed. Proposals containing information the bidder requires to be kept confidential will be rejected as non-responsive.

14.0 REFERENCES

Environmental Protection Agency,
<http://www.epa.gov/ttn/amtic/files/ambient/pm25/datamang/network-assessment-guidance.pdf>

Environmental Protection Agency,
<http://www.epa.gov/air/oaqps/pams/general.html>

Environmental Protection Agency, Section 182(c)(1) of the 1990 Clean Air Act Amendments

Federal Register, 40 CFR Parts 53 and 58, October 17, 2006.