SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

REQUEST FOR PROPOSAL

The District is seeking a qualified contractor to develop control profiles used in estimating area, point, or mobile source emissions.

Submittal: Five (5) copies of the proposal must be received at the

address below on or before:

Thursday, April 27, 2006 – 5:00 PM

PROPOSALS RECEIVED AFTER THE TIME AND DATE STATED ABOVE

WILL NOT BE ACCEPTED.

Address to: Gary Arcemont, P. E.

Air Quality Specialist

San Joaquin Valley Unified Air Pollution Control District

1990 East Gettysburg Avenue

Fresno, CA 93726

Mark Envelope: "Proposal - Control Profile Development"

Issuance Date: March 16, 2006

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1.0 SUMMARY

Air pollution control programs use predictive computer models to estimate future year emissions. These models are used to project attainment of ambient air quality standards. The emissions inventory is a key input into the predictive models. The San Joaquin Valley Unified Air Pollution Control District (District), in a cooperative effort with the California Air Resources Board (ARB), has undertaken several projects to improve its emission inventory. Inventory improvement projects allow the District to take advantage of new emission source data and the latest techniques in inventory development, which in turn provide a solid base for future efforts to reduce emissions in the San Joaquin Valley. The District has jurisdiction in the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, and the western portion of Kern.

This Request For Proposal (RFP) solicits proposals for a qualified contractor to develop control profiles to be used to forecast future year emission reductions. The project will produce a report and corresponding data files that contain control profiles used to estimate area, point, or mobile source emissions by county or portion of county within the District. The District will specify approximately 60 prohibitory rules with post-1990 implementation dates for evaluation. Successful respondents to this RFP will have demonstrated proficiency in developing control profiles.

2.0 BACKGROUND

Emission forecasts are used in developing State Implementation Plans (SIP's) and in tracking the progress of mandated emission reductions. A significant component of the ARB's emission forecasting system (CEFS) is control profile data. For each emission source or group of sources, the ARB assigns a control profile. The control profile is used to characterize effectiveness of prohibitory rules and the associated emissions reductions.

The ARB defines control profile terms in the paper located at:

www.arb.ca.gov/ei/pubs/cefs_mj.pdf#search='emission forecasting'

To summarize, the ARB defines the Control Level (CL) as:

$$CL = 1 - \{(1 - CE) * RE * RP\}$$

where:

CE is the Control Efficiency and is expressed by ARB as the fraction of remaining or uncontrolled emissions.

RE is the Rule Effectiveness and is defined by the ARB as the correction factor to adjust for "real-world" operating conditions (i.e. equipment breakdowns, operator variance, compliance rate, etc.)

RP is the Rule Penetration and is defined by the ARB as the degree a given rule penetrates the universe of emission processes coming under the purview of the rule (taking into account rule applicability, exemptions, etc.)

Example:

A control rule reduces emissions by 75%. Fraction of remaining emissions after control = 0.25, so CE = 0.25.

Rule Effectiveness (RE) of 60% is expected for the rule in the future year. So RE = 0.6.

Rule Penetration (RP) of 30% is anticipated for the rule affecting the category, so RP = 0.3.

$$CL = 1 - \{(1 - 0.25) * 0.6 * 0.3\}$$

$$CL = 0.865$$

A preliminary list of prohibitory rules to be evaluated is provided in Section 14. The District may add or delete rules from this list.

3.0 SCOPE OF WORK

For each specified prohibitory rule, the Contractor will develop Control Level, Control Efficiency, Rule Effectiveness, and Rule Penetration for individual years 1990 to 2030. Control Level, Control Efficiency, Rule Effectiveness, and Rule Penetration will be developed for each appropriate Standard Industrial Classification code (SIC), Source Classification Code (SCC) and Emission Inventory Code (EIC) and for each applicable criteria pollutant (NOx, VOC, SOx and PM10).

The Contractor will review the specified District rules and rule support documentation to quantify and summarize level of control. District staff reports may contain information on levels of control, exemptions and adoption dates for a specific prohibitory rule. This information may be used to develop the control profiles. In some instances, some counties may have adopted applicable rules prior to formation of the District in 1992.

In most cases, control profiles will be developed for the District as a whole. In some cases, Control Level, Control Efficiency, Rule Effectiveness, and Rule

Penetration may differ by county. If so, county specific data may be required. The Contractor will critically review and assess the current default assignments for the rules as specified by the District. As part of the control profile development, the Contractor will be in close communication with District staff, so that District staff has an opportunity to review the Contractor's findings.

The Contractor will prepare and submit a report that describes the project approach and methodology and presents the results. The report shall contain tables summarizing the control profiles and present all methodologies and calculations. The report shall document assumptions critical to the development of the conclusions and the justification for making assumptions leading to the conclusions.

Data produced by 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). Draft data files may need to be given to the District and should be clearly marked as "Draft, Not Releasable for Publication." Final data files should be submitted after the final report has been approved. The Contractor will provide the control profiles in electronic files that are in the proper format for loading into the appropriate ARB database.

4.0 WORK PRODUCTS/DELIVERABLES

- 4.1 INITIAL 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 project progress. Prior to the conference call (preferably the day before), the contractor will email the District a brief progress report that includes:
 - Brief summary of the last conference call, 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 work products. Contractor must be willing to receive guidance and direction from the District and adjust methods based on preliminary results.

- 4.3 DEVELOPMENT OF CONTROL LEVEL, CONTROL EFFICIENCY, RULE EFFECTIVENESS, AND RULE PENETRATION: For each specified prohibitory rule, the Contractor will develop a Control Level, Control Efficiency, Rule Effectiveness, and Rule Penetration for each year from 1990 to 2030. Control Level, Control Efficiency, Rule Effectiveness, and Rule Penetration will be developed for each appropriate EIC/SCC/SIC and for the appropriate criteria pollutant (NOx, VOC, PM10, SOx). Some rules will require detail by county.
- 4.4 UPDATE RULE MAPPING DATABASE: District and ARB staff maintain a rule mapping database that correlates District prohibitory rules to the corresponding SIC/SCC/EIC codes for point sources and EIC codes for area sources. Control profile data is also included in this database.

For each specified prohibitory rule in the existing rule mapping database, the Contractor will assess the appropriateness of the assignments and suggest alternatives as needed. The rule mapping database will be modified to include rules specified by the District that are not included in the current rule mapping database. The current rule mapping database is available for review upon request. Data will be submitted to the District in a format that is compatible with the appropriate ARB database. The database requires detail by county.

- 4.5 ELECTRONIC DATA SUBMITTAL: The Contractor will provide the control profiles in electronic files that may be batch loaded into ARB's CEFS model. The contractor will interact with District and ARB staff to facilitate loading of data into the appropriate database and ensure that the data is provided in the appropriate format. The project will be considered complete when the report and data files are deemed acceptable by the District. The Contractor must provide the information in an electronic format fully readable by the applications contained in Microsoft Office 2000 Professional.
- 4.6 REPORTS: A final report shall be submitted that includes the following:
 - 4.6.1 Overview of the project
 - 4.6.2 Discussion of methods and rationale used in developing the control profiles
 - 4.6.3 Detailed documentation of the calculations, assumptions, and sources of data used to develop the control profiles
 - 4.6.4 Tables of control profiles for each specified rule

- 4.6.5 Rule map summary
- 4.6.6 Discussions of data anomalies and quality assurance measures
- 4.6.7 References
- 4.6.8 Supporting documents, excerpts, and calculations shall be included in the report as appendices

The Contractor will submit an electronic copy of a draft final report for review by District staff. The District requires that the technical writing be clear and understandable. The District will review the draft final report and provide comments and suggest changes (if necessary). The Contractor will then submit a revised draft final report. Multiple report revisions may be required if the report is not written to the satisfaction of the District. When the District approves the draft final report, the Contractor will submit a final report. The District will verify that the final report does not need any additional changes.

- 4.7 FINAL REPORT: Upon approval of the final report by the District, the Contractor will deliver to the District ten 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. The report shall also include a record 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. Final data files containing the approved control profiles should be submitted after the final report has been approved.
- 4.8 Invoices and Progress Reports: The Contractor will submit an invoice. The invoice 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 work completed when the invoice and the associated progress report are deemed by the District to reflect work completed in accordance with the contract.

5.0 Project Timeline and Schedule of Deliverables

Table 1 is a tentative schedule of deliverables and payments. The District may amend the timeline at anytime during the project.

TABLE 1
SCHEDULE OF DELIVERABLES AND PAYMENTS

Action/Work Product	Approximate Date	Percent of Payment
Release of RFP	March 16, 2006	
Proposal Deadline	April 27, 2006	
Contractor Selection	May 2006	
Contract Approval	June 2006	
Contract Signature	June 2006	
Contract Effective	June 2006	
Bimonthly Progress Meetings	June - October 2006	
with District Staff		
Draft Control Profiles & Rule	October 2006	50%
Мар		
Final Control Profiles & Rule	November 2006	20%
Мар		
Draft Report	December 2006	10%
Final Report	January 2007	10%
Data input into ARB	January 2007	10%
database		

6.0 REQUIRED QUALIFICATIONS

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

- 6.1 Development of control profiles;
- 6.2 Development of emissions inventories;
- 6.3 Data compilation, access and manipulation;
- 6.4 Excellent working relationships with government agencies;
- 6.5 Skill in preparing clear reports;
- 6.6 Excellent technical writing skills.

The proposal 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 RFP.

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 25 printed pages with 1" margins and the font shall be 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. The cover letter will not be considered part of the 25-page limitation set for the proposal.
- 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 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. The work tasks for each rule may vary.
- 7.1.5 PROGRAM SCHEDULE (SECTION 3) Provide projected milestones or benchmarks for major products and 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. Briefly 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. Provide resumes for all technical personnel projected to be involved in the project. The resumes will not be considered part of the 25-page limitation set for the proposal. 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 each experience to this RFP. Include examples of control profile development or 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.
- 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.
- 7.1.13 ADDITIONAL DATA (SECTION 11) Include examples of reports prepared by the Contractor for previous control profile development projects. Report samples will not be considered part of the 25-page limitation set for the proposal. Provide information on projects

performed by the Contractor 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 lefthand corner with the name and address of the proponent and the words:

"Proposal - Control Profile Development"

Proposals must be received at the address below, no later than 5:00 p.m. on April 27, 2006, and should be directed to:

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

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

The bidder that is selected to perform the project 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 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.
- 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 and in the cover letter.

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 contractor selection 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:

- 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 the ARB and California air districts emissions evaluations;
- Previous experience in developing control profiles;
- Previous experience with emissions inventory development;
- Cost of proposal;

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 District will require that any contractor prior to endorsement of a contract meet the following insurance requirements.

- 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. Satisfactory proof shall be provided to the District prior to the commencement of this project of the maintenance of Public Liability Insurance in an amount no less than \$500,000 per person injured in any one accident, and not less than \$1,000,000 for more than one person injured in any one accident, and the maintenance of Property Damage Insurance in an amount not less than \$50,000.

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 LIST OF RULES

The following is a preliminary list of rules to be evaluated. The District may modify this list at any time during the course of the project.

Proposals shall list the cost for evaluation of Regulation VIII (Fugitive PM10 Prohibitions) as an individual task. Regulation VIII is a multiple-rule regulation that may be evaluated if adequate funds are available.

TABLE 2
PRELIMINARY LIST OF RULES TO BE EVALUATED

RULE	RULE TITLE	
NUMBER		
4204	Cotton Gins	
4305-4308,	Boilers, Steam Generators & Process Heaters	
4351		
4309	Dryers, Dehydrators and Ovens	
4311	Flares	
4313	Lime Kilns	
4352	Solid Fuel Fired Boilers, Steam Generators & Process Heaters	
4354	Glass Melting Furnaces	
4401	Steam Enhanced Crude Oil Production Well Vents	
4402	Crude Oil Production Sumps	
4403	Components Serving Light Crude Oil or Gases at Light Crude	
	Oil and Gas Production Facilities and Components at Natural	
	Gas Processing Facilities	
4404	Heavy Oil Test Station - Kern County	

RULE	RULE TITLE	
NUMBER		
4405	Oxides of Nitrogen Emissions From Existing Steam Generators Used In Thermally Enhanced Oil Recovery - Central and Western Kern County Fields	
4406	Sulfur Compounds from Oilfield Steam Generators - Kern County	
4407	In-Situ Combustion Well Vents	
4408 Glycol Dehydration Systems		
4409 Components at Light Crude Oil Production Facilities, Natur Gas Production Facilities, and Natural Gas Processing Facilities		
4451	Valves, Pressure Relief Valves, Flanges, Threaded Connections and Process Drains at Petroleum Refineries and Chemical Plants	
4452	Pumps and Compressor Seals at Petroleum Refineries and Chemical Plants	
4453	Refinery Vacuum Producing Devices or Systems	
4455	Components at Petroleum Refineries, Gas Liquids Processing Facilities and Chemical Plants	
4601	Architectural Coatings	
4602	Motor Vehicle and Mobile Equipment Coating Operations	
4603	Surface Coating of Metal Parts and Products	
4604 Can and Coil Coating Operations		
4605	Aerospace Assembly and Component Coating Operations	
4606	Wood Products Coating Operations	
4607	Graphic Arts	
4610	Glass Coating Operations	
4621	Gasoline Transfer into Stationary Storage Containers, Delivery Vessel and Bulk Plants	
4622	Gasoline Transfer into Motor Vehicle Fuel Tanks	
4623	Storage of Organic Liquids	
4624	Organic Liquid Loading	
4625	Wastewater Separators	
4641	Cutback, Slow Cure, and Emulsified Asphalt Paving and Maintenance Operations	
4642	Solid Waste Disposal Sites	
4651	VOC Emissions from Decontamination of Soil	
4652	Coatings and Ink Manufacturing	
4653	Adhesives	
4661	Organic Solvents	
4662	Organic Solvent Degreasing Operations	
4663	Organic Solvent Cleaning, Storage and Disposal	
4672	Petroleum Solvent Dry Cleaning Operations	
4681	Rubber Tire Manufacturing	

RULE NUMBER	RULE TITLE		
4682	Polystyrene Foam, Polyethylene and Polypropylene		
4004	Manufacturing		
4684	Polyester Resin Operations		
4691	Vegetable Oil Processing Operations		
4692	Commercial Charbroiling		
4693	Bakery Ovens		
4694	Wine Fermentation and Storage Tanks		
4701-4702	Internal Combustion Engines		
4703	Stationary Gas Turbines		
4901	Wood Burning Fireplaces and Wood Burning Heaters		
4902	Residential Water Heaters		
4905	Natural Gas Fired, Fan-Type, Residential Central Furnaces		