

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

REQUEST FOR PROPOSAL

The District is seeking a qualified contractor to develop emission growth factors, emission growth surrogates and activity projections used in forecasting area, point, or mobile source emissions.

Submittal: Five (5) copies of the proposal must be received at the address below on or before:
Tuesday, July 5, 2005 – 5:00 PM

PROPOSALS RECEIVED AFTER THE TIME AND DATE STATED BELOW
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 - Emission Growth Factors, Emission Growth Surrogates and Activity Projections Used in Forecasting Area, Point, or Mobile Source Emissions"

Issuance Date: June 6, 2005

Table of Contents

- 1.0 SUMMARY 1
- 2.0 BACKGROUND..... 1
- 3.0 SCOPE OF WORK 2
- 4.0 WORK PRODUCTS/DELIVERABLES 4
- 5.0 PROJECT TIMELINE AND SCHEDULE OF DELIVERABLES 7
- 6.0 REQUIRED QUALIFICATIONS..... 7
- 7.0 RESPONSE SUBMITTAL REQUIREMENTS 8
- 8.0 ESTIMATION OF COSTS 11
- 9.0 PROPOSAL EVALUATION AND CONTRACTOR SELECTION 12
- 10.0 INSURANCE..... 12
- 11.0 DATA OWNERSHIP 13
- 12.0 INQUIRIES..... 14
- 13.0 CONFIDENTIAL INFORMATION 14
- 14.0 FAITHFUL PERFORMANCE BOND..... 14
- 15.0 REFERENCES..... 14

1.0 SUMMARY

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 to prepare a report and corresponding data files that contain emission growth factors, emission growth surrogates and activity projections used to forecast area, point, or mobile source emissions by county or portion of county within the District and by the appropriate EIC, SIC, and SCC codes. The District will specify approximately ten source categories for evaluation. Types of facilities that may be evaluated are:

- Oil Production
- Gas Production
- Airports
- Rail yards
- Port of Stockton
- Oil Refineries

The Contractor will:

- Identify the most appropriate default growth surrogates for specified categories of emission sources at the county or partial county level, and
- Develop detailed historical data and projections of the surrogates for years 1970 to 2030, and
- Develop county or partial county specific emission growth factors and activity data based on county or partial county specific data.

Successful respondents to this RFP will have demonstrated proficiency in forecasting demographic and economic activities at the county or partial county level and in developing emission growth factors and surrogates.

2.0 BACKGROUND

Emission forecasts are used in developing State Implementation Plans (SIP's) and in tracking the progress of mandated emission reductions. A key component of the California Air Resources Board (ARB) emission forecasting system (CEFS)

is growth data. For each emission source or group of sources, the ARB assigns a default growth surrogate. The growth surrogate is used to characterize emissions growth.

The ARB categorizes emission sources as area, point, or mobile sources. Area and mobile sources are identified by an emission inventory code (EIC), while point sources are identified by a source classification code (SCC) and a standard industrial classification code (SIC). The ARB assigns a growth surrogate to each EIC code for area sources. For most point sources, the ARB assigns a growth surrogate by 4-digit SIC. Generally, ARB employs economic output and employment data as the growth surrogate to forecast point sources emissions. For area and mobile sources, the ARB employs a mix of economic and other socio-demographic data as growth surrogates to forecast area source emissions.

3.0 SCOPE OF WORK

The Contractor will critically review and assess the current default assignments of growth surrogates for area, point, or mobile source categories as specified by the District. The Contractor will determine the most appropriate growth surrogate for each emission source category. The Contractor will develop detailed activity projections based on the surrogates deemed most appropriate by the District for the selected categories.

The District requires surrogate data to be developed on a county or partial county level, using county or partial county specific data. A general estimate of a percentage of growth per year for each industry is not sufficient detail. It is also not sufficient to obtain growth data for the state and apportion it by county or partial county. Projecting historical trend data forward may not be an acceptable method for projecting future growth for this project, unless the contractor displays that it is an accurate projection method. The District expects a detailed investigation of local industry growth.

3.1 DETERMINE THE MOST APPROPRIATE GROWTH SURROGATE FOR EACH EMISSION SOURCE CATEGORY

The Contractor will assess the current default growth surrogate assignments. The Contractor will evaluate data availability of historical and projected activity at the county or partial county level. The Contractor will develop innovative approaches or models to best characterize emissions growth. The Contractor will establish the pattern of growth for the industry applicable to each county or partial county and determine if this pattern matches existing surrogates used for other emission categories, or requires a unique computational surrogate.

As part of the growth surrogate development, the Contractor will be in close communication with the District, so the District has an opportunity to review the Contractor's findings concerning use of an existing surrogate or development of a new surrogate. The goal is to determine the most appropriate surrogate for each category. The identification of a new surrogate requires a determination that the methodology will be replicable by the District for future updates to the emissions and growth projections. The District will approve the final surrogate choices before the Contractor develops the detailed growth data.

3.2 DEVELOP HISTORICAL DATA FOR GROWTH SURROGATES

For each of the growth surrogates identified in Task 3.1, the Contractor will use or develop a statistically valid method to develop growth surrogate activity data for years 1970 to 2004 for each county or partial county in the District. The growth projection methodology must be approved by the District and be documented in the final report.

3.3 DEVELOP EMISSION GROWTH FACTORS

For each of the growth surrogates identified in Task 3.1, the Contractor will calculate emission growth factors for years 2004 to 2030 for each county or partial county in the District.

3.4 REPORTING

The Contractor will prepare and submit a report that describes the project approach and methodology and presents the results of Tasks 3.1, 3.2 and 3.3. The executive summary of the report shall contain a table summarizing emission growth factors. The report shall present all methodologies, calculations, emission growth factors, emission growth surrogates and activity data used to complete the Tasks and document assumptions critical to the development of the methodology or calculations and the justification for making these assumptions. The report shall also include a record of data sources referenced or used to support the evaluation and completion of the Tasks. The District may request that a copy of these reference documents accompany the final report to provide complete documentation. Some of these documents may need to be provided to the District during Task 3.1 for effective evaluation, discussion and approval of surrogates or methodologies. Documents generally available to the public shall be referenced in a bibliography. The District requires that the technical writing be adequate to clearly explain the process used to develop the emissions data. Multiple report revisions may be required if the report is not written to the satisfaction of the District.

Significant correspondence as part of data gathering should be documented in an appendix. An email or phone log should include contact name, date, phone number or email address, and a brief summary of the correspondence. Supporting documents, excerpts, and calculations shall be reproduced and attached to the report as appendices.

Data produced by this project must be submitted to the District in a format specified by the District using Microsoft Office 2000 Professional, Excel or Access software. Draft data files may need to be given to the District during the conduct of Tasks 3.1, 3.2 and 3.3 and should be clearly marked as "Draft, Not Releasable for Publication." A full copy of all final data files relevant to the approved final methodologies, growth surrogates, growth factors and calculations should be submitted after the Final Report has been approved.

The Contractor will provide the emission growth factors and growth surrogate activity data in electronic files that are in the proper format for loading into the ARB data base.

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 task progress. 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 EMISSION GROWTH FACTORS, EMISSION GROWTH SURROGATES AND ACTIVITY PROJECTIONS USED IN FORECASTING POINT, AREA AND MOBILE SOURCE EMISSIONS: Contractor shall develop emission growth factors, emission growth surrogates and activity projections used in forecasting all categories specified by the District. Data must be reported by county or partial county and by emission source category.

The growth surrogate activity data must be specified by county or partial county, and by year from 1970-2030 in the following increments:

- Every 5 years for 1970 to 1995.
- Every year for 1995 to 2020.
- Every 5 years for 2020 to 2030.

4.4 ELECTRONIC DATA SUBMITTAL: The Contractor will provide the growth surrogate activity data in electronic files that may be batch loaded into ARB's CEFS model (electronic formats to be supplied by ARB staff). The Contractor must submit data in PAD & GAP format to the District. The project will be deemed complete when the report and data files are acceptable to the District. The Contractor must provide the information in an electronic format fully readable by the applications contained in Microsoft Office 2000 Professional.

4.5 REPORTS: The Contractor will prepare a draft final report and a final report. The final report shall include an overview of the project and a summary of the findings. The executive summary of the report shall contain a table summarizing emission growth factors. The reports will include, as applicable, the following:

4.5.1 Discussion of methods and rationale used in determining the most appropriate growth surrogate for each emission source category

4.5.2 Detailed documentation of the methodologies, calculations, assumptions, and sources of data used to develop or obtain the historical and projected activities for the growth surrogates and growth factors at the county or partial county level

4.5.3 Tables of growth surrogate assignments and growth factors by emission source category

4.5.4 Tables of the historical and projected activity data (1970-2030) for each growth surrogate by county or partial county

4.5.5 Discussions of major trends

4.5.6 Discussions of data anomalies and quality assurance measures

Documents generally available to the public shall be referenced in a bibliography. The District may request that a copy of these reference documents accompany the final report. Documents not generally available should be included as an appendix. Supporting documents, excerpts, and calculations shall be reproduced and attached to the report as appendices.

The Contractor will deliver to the District an electronic copy of a draft final report for review by staff.

- 4.6 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 produced. 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. A full copy of all final data files relevant to the approved final methodologies and calculations should be submitted after the Final Report has been approved.
- 4.7 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 or source categories. 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.

TABLE 1
Schedule of Deliverables and Payments

Action/Work Product	Approximate Date	Percent of Payment
Release of RFP	June 6, 2005	
Proposal Deadline	July 5, 2005	
Contractor Selection	July 11, 2005	
Contract Approval	August 18, 2005	
Contract Signature	August 18, 2005	
Contract Effective	August 18, 2005	
Draft Growth Surrogates, Growth Factors & Methodologies		5% per category (Based on 10 categories)
Final Growth Surrogates, Growth Factors & Methodologies	April 3, 2006	
Draft Report	June 5, 2006	10%
Final Report	July 18, 2006	10%
Data input into ARB data base	September 18, 2006	30%

6.0 REQUIRED QUALIFICATIONS

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

- 6.1 Development and use of emission growth surrogates and activity projections used in forecasting area, point or mobile source emissions;
- 6.2 Development of emission growth factors and emissions inventories;
- 6.3 Data compilation, access and manipulation;
- 6.4 Good working relationships with government agencies;
- 6.5 Report preparation and presentation.

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 25 pages with 1" margins and the font shall be no smaller than Arial, 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.
- 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 source category may vary.
- 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 each experience to this RFP. Include examples of emission growth factor development; emission growth surrogates evaluation and activity projections 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. Costs shall be specified by each of the source categories.
- 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 below).
- 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-five-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 - Development of Emission Growth Factors, Emission Growth Surrogates and Activity Projections Used in Forecasting Area, Point, or Mobile Source Emissions”

Proposals must be received at the address below, no later than 5:00 p.m. on July 5, 2005, and should be directed to:

Mr. Gary Arcemont, P. E.
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

The total cost for these services shall not exceed \$100,000. 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:

- 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 California air districts emissions evaluations;
- Previous experience in preparation of emission growth factors;
- Previous experience in developing emission growth surrogates;
- 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.

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 FAITHFUL PERFORMANCE BOND

The Contractor shall be required to enter into a written contract agreement, as provided by the District. The Contractor, upon notice of award of bid, shall furnish in duplicate a Labor and Material Bond in and the amount of one hundred percent (100%) of the contract price, and a Faithful Performance Bond in the amount of one hundred percent (100%) of the contract price in exchange for his bid check (or bond). Said bonds are to be secured from a surety company.

15.0 REFERENCES

California Air Resources Board, Request For Proposals, Development of Emission Growth Surrogates and Activity Projections Used in Forecasting Point and Area Source Emissions, March 1999