

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

REQUEST FOR PROPOSAL

April 18, 2005

The District is seeking a qualified contractor to develop emission factors and an emission inventory for leaf blowers in use in the San Joaquin Valley.

PROPOSAL DEADLINE HAS BEEN EXTENDED
All proposals are due to the District by 5 p.m. on Friday, May 20, 2005.

Proposals are to be labeled:

Proposal – Leaf Blowers Emission Factors and Emissions Inventory

All inquiries concerning this Request for Proposal shall be directed to:

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1.0 SUMMARY

The San Joaquin Valley Unified Air Pollution Control District (District), in a cooperative effort with the California Air Resources Board (CARB), 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 air pollution in the San Joaquin Valley.

Every year, San Joaquin Valley cities and counties and the Valley Air District receive numerous citizen complaints about fugitive dust, noise, and exhaust emissions from leaf blowers. Due to the District's commitments stated in the 2003 PM₁₀ Plan and strong public interest in the use and impacts of leaf blowers, the District will undertake a comprehensive investigation of fugitive dust emissions from leaf blowers. Noise and exhaust emissions issues have been addressed by CARB.

The contractor shall produce a scientifically valid set of emission factors that characterize the emissions of leaf blowers in use in the San Joaquin Valley. The study must also include development of emission factors for alternative cleaning methods such as broom sweeping and lawn vacuuming. Direct measurements of PM, PM₁₀ and PM_{2.5} shall be obtained using accepted test methods for measuring particulate matter in ambient air.

The contractor shall also produce an emissions inventory for leaf blowers in use in the San Joaquin Valley using the emission factors generated in this study. If leaf blower emissions are found to be significant, the category may become a candidate for control in District plans and regulations.

2.0 BACKGROUND

This Request For Proposal (RFP) solicits proposals to develop a set of emission factors and emission inventory that characterizes leaf blower fugitive dust emissions in the San Joaquin Valley. The following background information may be of use in the preparation of proposals.

2.1 CARB Report

In February 2000, CARB published a report entitled "A report to the California legislature on the potential health and environmental impacts of leaf blowers" which indicates that there are approximately one million leaf blowers in California that are operated an estimated 114,000 hours per day in California. Several emissions estimates for leaf blowers were presented in the report:

- 8.6 tons per day PM₁₀ in South Coast Air Basin
- 3.2 tons per day dust emissions in Sacramento County
- 147.8 tons per day PM₁₀ in California

Adjusting the preliminary statewide emission estimates to reflect the population of the San Joaquin Valley, the emissions range from 0.5 to 12 tons of PM₁₀ per day, depending on the emission factors used. While the range of values above is a reasonable preliminary estimate, District staff has several main concerns regarding the input data used for the preliminary emission estimates produced in the CARB report:

- The emission factors are based on silt loading measurements and not on direct emission measurements.
- The surfaces studied for silt loading included curbs/gutters, roadways, and shoulders, but not surfaces where leaf blowers are more commonly used, such as driveways, sidewalks and flower beds.
- The silt loading measurements were made in San Bernardino County and may not accurately reflect San Joaquin Valley vegetation, soil and meteorology.
- The method for estimating activity rates for leaf blower usage is unclear.

These issues should be considered when developing a work plan for this project.

2.2 Emissions Calculation Methodology

The District encourages flexibility in test procedures to obtain emission factors that will allow an accurate calculation of fugitive dust emissions from the use of leaf blowers in the San Joaquin Valley. Emission calculation methodologies should be discussed in detail in the proposal. The contractor shall explain how emissions will be calculated using activity data and emission factors developed in this study. An emissions estimate will be a required part of the final report.

3.0 SCOPE OF WORK

The contractor shall generate a scientifically valid set of emission factors that characterize the fugitive dust emission rates of leaf blowers in various operating conditions in the San Joaquin Valley. Emission factors will be developed for particulate matter (PM), particulate matter ten microns in diameter or less (PM₁₀), and particulate matter 2.5 microns in diameter or less (PM_{2.5}).

In addition, the contractor shall generate a scientifically valid set of emission factors that characterize fugitive dust emissions for alternative cleaning methods that use;

1. a broom, (worn brushes)
2. a vacuum, (bag full and bag empty)
3. a rake (optional).

The test should be conducted on various surfaces, including:

1. concrete driveway
2. concrete sidewalk
3. asphalt parking lot
4. grass or lawn (optional)
5. flower beds (optional).

The work plan shall address how the contractor will evaluate emissions from leaf blowers in use in various soil types and various debris loading conditions. The District may choose to streamline the field measurement program, by reducing the number and scope of the field measurements. Cost estimates should be generated with and without test conditions listed as optional. Field measurements will be conducted in Fresno.

The contractor shall develop a work plan to describe how these tasks will be accomplished. The contractor shall produce a thorough analysis using the most current data and techniques. Emission factors must be in units that allow calculation of emissions using available activity data. The District must approve the emission factor calculation methodology and the emissions inventory methodology. The contractor will develop an emissions inventory for leaf blowers in use in the San Joaquin Valley.

The contractor shall provide draft and final reports. The District will review the draft report produced by the contractor and produce comments to be submitted to the contractor. The contractor will be required to revise the draft document to the reasonable satisfaction of the District, which may require multiple revisions. The final report shall include an overview of the project and a summary of both the emission calculations and the methodology used to determine the emissions. Emissions shall be tabulated for each county in the District (Kern County emissions shall be tabulated for the San Joaquin Valley portion only). The contractor must provide the information in an electronic format fully readable by the applications contained in Microsoft Office 2000 Professional.

Under the guidance of the District, contractor shall perform the following tasks:

- Prepare a work plan that describes the how the emission factors and emissions inventory will be developed.
- Submit the work plan and methodology to the District for review and approval.
- Gather background data to be used to calculate emissions from leaf blowers in use in the San Joaquin Valley. Explain how activity data will be used to calculate emissions.
- Conduct a field measurement program to obtain direct measurements of particulate matter generated by the use of leaf blowers and alternatives to leaf blowing, such as a broom, vacuum and rake. Emission factors should be developed for each category listed in this scope of work.
- Prepare a report that describes the project and presents the results, including a table of emission factors and emissions inventory for leaf blowers in use in the San Joaquin Valley.
- Submit data collected by this project in a database or spreadsheet.

Payments will be made upon satisfactory completion of work products as outlined in Section 5, Table 1, Schedule of Deliverables and Payments. The District reserves the right to halt work on this project at any time if it anticipates unsatisfactory results. In the event this occurs, the contractor will be paid for work completed.

4.0 WORK PRODUCTS/DELIVERABLES

Initial meeting or conference call: At the start of the contract period, the principal investigator and key personnel will meet with District staff in person or via telephone to discuss the overall plan and details of performing the tasks. Modifications to the scope of work may be made at this time.

Periodic conference call and progress reports: At regular intervals defined by the District, the principal investigator and key personnel will meet with District staff via telephone to discuss the overall plan and details of progress of performing the tasks. 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. The District may be present when field measurements are made to inspect data collection tasks.

Draft Report: The Draft Report shall present all methodologies, emission factors, and measurements, and shall include a record of data sources, calculations, and assumptions. Documents generally available to the public shall be referenced in a bibliography. The District may request a copy of these documents. The executive summary of the report shall contain a table summarizing emission factors. Other documents, excerpts, and calculations shall be reproduced and attached to the report as appendices. 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 reasonable satisfaction of the District.

Final Report: The draft report can be labeled as the Final Report when comments and questions made by District staff have been addressed to the reasonable satisfaction of the District.

Final Data Submittal: 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. Data should be submitted after the Final Report has been approved.

5.0 PROJECT TIMELINE AND SCHEDULE OF DELIVERABLES

Preliminary results are required by August 2005 so that the information can be included in the District's Draft 2006 PM10 Plan. Final conclusions need to be complete by November 2005 for inclusion into the District's Final 2006 PM10 plan, which is due in December 2005. The District may amend the following tentative timeline. Payment will be made when a work product is deemed satisfactory by the District.

TABLE 1
Schedule of Deliverables and Payments

Action/Work Product	Approximate Date	Percent of payment due at completion and approval of task deliverables
Release of RFP	April 19, 2005	
Proposal Deadline	May 20, 2005	
Contract Approval	June 16, 2005	
Methodology and Work Plan	June 20, 2005	10%
Field Measurements and Preliminary Results	August and September 2005	50%
Draft Report	October 31, 2005	20%
Final Report and Data Submittal	November 21, 2005	20%

6.0 REQUIRED QUALIFICATIONS

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

- Development of emission factors and emissions inventories;
- Use of particulate monitoring equipment;
- Particulate measurement and field measurement programs;
- Data compilation, access and manipulation;
- Report preparation and presentation; and
- Good working relationships with government agencies.

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 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, 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. 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) - Include a detailed scope of work. 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. Include resumes and 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 emissions inventory, particulate field measurements 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 task.
- 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. (Any examples that are provided by proposer may be above and beyond 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

- 7.2.1 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.
- 7.2.2 Signature- all proposals shall be signed by an authorized representative of the proponent.
- 7.2.3 Due Date - The proponent shall submit five (5) complete 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 – Leaf Blower Emission Factors and Emissions"**

Inventory.” Proposals are due no later than 5 p.m. Friday, May 20, 2005 and should be directed to:

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.

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 any or all proposals, and make no awards. The District reserves the right to cancel the request for proposals or decide not to proceed with the project after review of proposals.

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 EVALUATIONS 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. Proposals will be evaluated on the following criteria:

- Cost of proposal;
- Previous satisfactory experience with the District;
- 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 with preparation of emission inventory methodologies;
- Previous experience in writing clear technical reports;
- Previous experience in conducting particulate measurements and field measurement programs;

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 and availability of appropriations. 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 which is received, collected, produced, or developed by Contractor shall become the exclusive property of the District, provided however, 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 of the Planning Division 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 contractor 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, A report to the California legislature on the potential health and environmental impacts of leaf blowers, February 2000