Request for Proposals

Technology Advancement Program Demonstration Projects

The San Joaquin Valley Air Pollution Control District (District) is seeking proposals for projects to demonstrate innovative emission reduction technologies and that have the potential for broad applicability in the San Joaquin Valley to assist the District in meeting its air quality goals.

Submittal: One electronic copy of each proposal must be received at the

address below (via CD-ROM or DVD) or at the e-mail address

below on or before:

Friday, August 29, 2014, 5:00 P.M. Pacific Daylight Time Friday, August 15, 2014, 5:00 P.M. Pacific Daylight Time

Proposals received after this time and

date will not be accepted.

Address to:

Chelsea Gonzales
Air Quality Specialist

San Joaquin Valley Air Pollution Control District

1990 East Gettysburg Avenue

Fresno, CA 93726-0244

Technology@ValleyAir.org

Issuance Date:

Wednesday, June 18, 2014

RFP Number:

TAP14-01





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1.0 Background

The San Joaquin Valley Air Pollution Control District (District) is issuing this Request for Proposals (RFP) to solicit applications for funding of projects that demonstrate innovative emission reduction technologies. The applicants must possess and document the substantial expertise required to conduct a demonstration project with the proposed technology within the required time period. To be considered, proposals must be submitted in the required format and must comply with specified budget constraints.

The primary goal of this RFP is to advance the development and to accelerate the deployment of innovative, clean-air technologies for near- and long-term emissions reductions. To address both ozone and fine particulate matter (PM2.5) concerns (both pollutants being driven primarily by NO_X emissions), this RFP places a particular emphasis on NO_X emission reduction technologies. However, to enhance efficiency and expand potential funding opportunities, the District encourages projects with co-benefits for reduction of other criteria pollutant emissions and greenhouse gases.

Air quality challenges in the San Joaquin Valley (Valley) are unmatched by any other region in the State. Despite major reductions in emissions and corresponding improvements in air quality, the Valley's topography, climate, and geography, combined with the presence of two major transportation corridors connecting northern and southern California, contribute to the region's difficulty in meeting federal health-based standards for particulate matter and ozone. The Valley's extreme non-attainment designation for ozone reflects the significance of these challenges. The District's 2007 Ozone Plan contains a "black box" representing necessary reductions in emissions for which a control measure or technology has not yet been identified. The U.S. Environmental Protection Agency (EPA) is in the process of promulgating tougher ambient air quality standards to provide further protection for health; thus, requiring further emissions reductions. To attain current and future federal air quality standards, the District will be relying on significant advancements in zero- and low-emission technologies for mobile and stationary sources.

The District has been successful in developing the Technology Advancement Program, in part because of a funding collaboration with the EPA's Clean Air Technology Initiative.

2.0 District Contacts

Technical questions regarding this RFP should be addressed to:

Technology Advancement Program Staff San Joaquin Valley Air Pollution Control District 1990 East Gettysburg Avenue Fresno, CA 93726-0244 (559) 230-5800, FAX (559) 230-6112 technology@valleyair.org

3.0 Timeline

3.1 Dates

June 18, 2014 Release of RFP
July 2, 2014 RFP workshop (2:00 P.M.)

August 29, 2014 RFP closes (no later than 5:00 P.M.)

August 15, 2014 RFP closes (no later than 5:00 P.M.)

December 18, 2014 Review and selection of approved projects

Note: all times are in Pacific Daylight or Standard Time, as applicable.

3.2 RFP Workshop

The District will host a workshop to address questions from potential applicants interested in submitting a proposal. Attendance at the workshop is **NOT** a requirement for submitting a proposal. A summary of questions and answers will be posted on the Technology Advancement Program's web page after the workshop at http://www.valleyair.org/TAP.

The workshop will be held on **July 2, 2014**, at 2:00 P.M. to 3:30 P.M. Pacific Daylight Time.

Please RSVP for this event by June 30, 2014 by e-mail to **technology@valleyair.org.** Please include your name, title, office/agency, phone number, e-mail address, and the location where you'll be attending.

The meeting with be held in the District's Central Region Office VTC Room at:

Fresno

District Central Region Office 1990 E. Gettysburg Ave. Fresno, CA 93726 You may also attend the workshop via live video teleconference systems at:

Bakersfield

District Southern Region Office 34946 Flyover Court, Bakersfield, CA 93308

Modesto

District Northern Region Office 4800 Enterprise Way, Modesto, CA 95356

San Francisco*

EPA Region 9 Headquarters 1st Floor Conference Room 75 Hawthorne Street San Francisco, CA 94105

Los Angeles*

EPA Region 9 Southern California Field Office 600 Wilshire Blvd., Suite 1460 Los Angeles, CA 90017

*EPA Locations are tentative; a final list of teleconference sites will be available on the Technology Advancement Program web page prior to the meeting at http://www.valleyair.org/TAP. For those who are attending a session at EPA's San Francisco or Los Angeles office, please arrive at least 20 minutes prior to the start of this presentation to allow for sufficient time to pass through building security. For any questions regarding the EPA teleconferences, please contact John Mikulin at mikulin.john@epa.gov.

The workshop can also be viewed via webcast at: http://www.valleyair.org/webstreaming/webcast-meetings.htm.

4.0 Award Information

4.1 Objective

The District requests proposals from project teams for projects that demonstrate bold, innovative emission reduction technologies. Project teams include the key project partners necessary to complete the demonstration, such as the technology developer(s), demonstration host, educational institution, or other essential partners.

The ideal technologies will be those that are near commercialization and that may need a successful demonstration to overcome barriers in bringing the technology to market. Projects that meet this near-term objective will be given preference in the selection process; however, projects for technologies with longer-term applications will not be excluded.

To be selected for funding, the technology must be capable of being put into operation for demonstration within one year of grant agreement execution with the District. Additional schedule requirements are defined in later sections of this RFP. Strong preference will be given to those proposals with projects in the Valley; however, the District will consider projects outside the Valley if such

projects have a significant potential to reduce Valley emissions. Extra credit will be given to those proposals that identify Valley education institution partners (i.e. colleges or universities).

For this funding allocation, the District is seeking technologies from the following technology focus areas:

- I. Renewable Energy. Renewable energy projects will focus on overcoming the barriers that prevent the use or adoption of zero-emission renewable energy sources or reduce emissions from renewable energy systems to make them cleaner than comparable non-renewable alternatives.
- **II. Waste Solutions**. Waste solutions projects will focus on waste systems or technologies that minimize or eliminate emissions from existing waste management systems and processes, including waste-to-fuel systems such as dairy digesters and other bio-fuel applications.
- **III. Mobile Sources**. Mobile source projects will demonstrate zero- or near-zero-emissions solutions to mobile source categories with emphasis on goods and people movement, off-road equipment, or agricultural equipment.

Projects may overlap these technology focus areas; however, the District will evaluate each proposal under the focus area in which the project best meets District objectives and goals. Project teams should clearly indicate which focus area they want to be included under. The District will evaluate and compare projects within each focus area instead of across focus areas.

4.2 Available Funding

The total funding available under this RFP is approximately \$4,000,000. The District will distribute funding across the three technology focus areas based on the number and competitiveness of proposals submitted. There is no funding limitation for the individual awards; however, the District is seeking to maximize the number of projects funded through this solicitation.

The District reserves the right to make additional awards under this announcement if additional funding becomes available after the original selections. In addition, the District reserves the right to reject all proposals and make no awards under this announcement or to make fewer awards than anticipated.

4.2.1 Funding Type

The District will fund selected projects in the form of a grant agreement. The District and selected project team shall negotiate precise terms and conditions of the grant agreement; however, deviation from the general contract terms as

stated in the Sample Grant Agreement (Appendix A) shall only be considered in rare circumstances.

In all cases, the District will provide funding to selected project teams as reimbursement for goods and materials purchased or for services provided by the project team, provided such expenditures are consistent with the statement of work and documented on the claim-for-payment form. The District will enforce grant awards through legally binding agreements, and funding will be contingent upon completion of specific milestones and successful execution of the entire project. In no case will advance payment be awarded to project teams prior to work being completed or for work completed prior to the execution of a binding contract. The District will withhold 10 percent of each reimbursement request until final fulfillment of all contract agreements.

4.2.2 Eligible Expenses

The District will **only** reimburse eligible expenses identified in the approved project proposal budget. The District's reimbursement process requires the submittal of documentation of eligible expenses incurred during the project period.

Eligible expenses include:

- The purchase of equipment and equipment-related consumables necessary to demonstrate the proposed technology
- Subcontracting and labor associated with the manufacture, installation, and testing of demonstration equipment
- Subcontracting of emissions testing
- Subcontracting to local universities and colleges

Ineligible expenses include:

- Subcontracting and labor related to engineering and design
- Administrative costs, such as facility costs, accounting, legal, insurance, and administrative labor
- Travel expenses
- Permit costs

Ineligible expenses should be included in the budget as in-kind or matching funds to accurately represent the total project cost.

4.2.3 Partial Funding

The District reserves the right to partially fund proposals by funding discrete portions or phases of proposed projects. If the District decides to partially fund a project, it will do so in a manner that does not affect the basis upon which the

proposal or portion thereof was evaluated and selected for award, thereby maintaining the integrity of the competition and selection process. The project team retains the right to withdraw the proposal as a binding offer to perform services if the project team determines or considers that the proposed partial funding, as defined by the District, will not result in a project capable of producing a successful outcome.

4.2.4 Contracting

The District has established a standard contract for all Technology Advancement Program agreements. Project teams should carefully review the sample grant agreement included in Appendix A to ensure a smooth and timely contracting process. Only in *rare* circumstances will the District allow substantive changes to the language of the contract. The statement of work will be included as part of the grant agreement; it will further detail the project timeline, deliverables, and expected reimbursement dates and amounts. Changes to project timelines or delivery of work products may require a subsequent contract amendment.

4.2.5 Project Management, District Services, and Budget

Contractors will report progress and communicate on substantial issues during the life of the project with a District project manager. Any substantial modification of project scope or design shall require approval by the project manager. Contractors will allow the project manager or designated District staff sufficient access during the project to perform oversight, review, and monitor project progress to confirm that grant agreement requirements are being met, that the project is being conducted as proposed, and that the project is in compliance with required timelines. District staff may also assist the project through technical support such as emissions testing, development of specifications for evaluation of project data, quantification of results, and identification of required reporting outputs. However, the project team is responsible for all costs and efforts required to conduct the project and should identify within the proposal any required participation and collaboration by District staff considered essential for completion of the project. Contractors should not assume that any expense will be covered by the District that is not specified in the proposed budget and will not be permitted to amend the project budget for expected services or support not identified and requested in the proposal.

4.3 Reporting Requirements

The District requires quarterly progress reports from all award recipients. Such reports will be due one month after the end of each calendar quarter as outlined in the statement of work attached to the grant agreement. A final report including emission information, cost-effectiveness of emissions reductions, and commercialization potential must be submitted approximately two months after

the scheduled completion of the demonstration period and by the date included in the statement of work. The District may require contractors to present the draft final report to applicable or interested agencies or groups as may be determined during contracting.

Details of these reports are included within Appendix A: Sample Grant Agreement.

4.4 Project Period

The project period for awards resulting from this solicitation will begin as appropriate after review of applications and selection of participants. Selected project teams must be prepared to execute grant agreements within 60 days of proposal selection. Projects should be operational no later than one year from the execution of the grant agreement. The operational period may be determined as part of the project team's proposal; however, the extent of the operational period shall be terminated with sufficient time remaining to allow evaluation, writing, and submittal of a final project report no later than three years after execution of the grant agreement.

4.5 Additional Requirements

4.5.1 Disadvantaged Business Enterprise (DBE)

Contractors shall not discriminate on the basis of race, color, national origin, or sex in the performance of any projects selected for funding under this RFP. Contractors shall carry out applicable requirements of 40 CFR Part 33 in the award and administration of contracts awarded as a result of any grant agreement resulting from this RFP.

Contractors must employ the six good-faith efforts described in 40 CFR 33.301 in any subcontracting occurring as a part of any project receiving funding as a result of this RFP.

4.5.2 Data Universal Numbering System Number

All program applicants must have and include in their proposal (see section 8.1.1) a Data Universal Numbering System (DUNS) number. A DUNS number is the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at http://fedgov.dnb.com/webform).

4.5.3 Debarment and Suspension

In order to be eligible for participation in this RFP, applicants must not presently be debarred, suspended, proposed for debarment, declared ineligible, voluntarily excluded from participation, or otherwise excluded from or ineligible for participation under federal assistance programs. Project teams must ensure that all subcontractors employed for conduct of this project certify to the project team compliance with this provision requirement.

5.0 Pre-screening for Technical Completeness and Project Readiness

Each application will be pre-screened to determine if eligible for technical completeness and overall project readiness prior to being considered for full evaluation. The following key eligibility criteria will be evaluated:

- Proposed project addresses one or more of the technology focus areas defined in Section 4.1.
- Application meets all submittal requirements detailed in Section 8.0.
- Proposed project includes Valley-based demonstration or shows significant potential for Valley-based emission reductions, per Section 4.1.
- Emission reduction estimates, per Section 8.1.8, are appropriately supported.
- Project partners that are not co-applicants demonstrate intent to execute necessary sub-agreements with the appropriate project applicant, per Sections 8.1.6 and 8.1.10.
- Project budget clearly identifies eligible and ineligible expenses, per Section 4.2.2.

6.0 Proposal Evaluation and Approval

Only proposals meeting the minimum technical completeness and project readiness requirements (section 5.0) will qualify for evaluation. The District will not notify project teams that do not qualify.

District staff will evaluate, score, and rank all proposals and recommend the highest scoring projects to the District's Governing Board for approval at a Governing Board meeting in the fourth quarter of 2014. The District will evaluate proposals within each technology focus area (section 4.1) to ensure fair comparisons of qualifying proposals. If an adequate number of proposals are submitted, awards will be made in all focus areas.

The District will evaluate qualifying proposals using the following eight criteria and their associated weighting:

| Criterion | Percent of Total Score |
|--|------------------------|
| 6.1 Supports Air Quality Objectives | 35% |
| 6.2 Program Funding Required and Resource Leveraging | 20% |
| 6.3 Innovation and Technology Advancement | 10% |
| 6.4 Co-Benefits | 10% |
| 6.5 Technology Cost-Effectiveness | 10% |
| 6.6 Project Readiness | 10% |
| 6.7 Ongoing Use of Technology in the Valley | 5% |
| 6.8 Building Capacity at Local Colleges and Universities | Extra Credit* |

^{*}Extra credit for this category may be up to 10%.

6.1 Supports Air Quality Objectives

Evaluation in this category will be based on the needs addressed in the District's ozone and particulate matter attainment plans, the District's *Health Risk Reduction Strategy*, and the proposal's applicability to the technology focus areas (per Section 4.1 of this RFP). Key considerations include:

- NO_X, as the critical precursor to ozone and PM2.5 formation in the Valley
- Directly emitted PM2.5, considering the variable toxicity based on particle size, chemical species, and surface area of PM2.5 and the concomitant health impacts
- Significance of emission sources in the Valley, including the potential impact of the proposed technology in ameliorating those emissions
- The potential health benefits due to emissions reductions near urban population centers and areas with the highest social and environmental vulnerabilities

Demonstration technologies may not have well-established emissions information; however, the District will consider the quality of support material provided to substantiate emission reduction estimates. Emission reduction estimates provided, and summarized on the *Emissions Reduction Summary Sheet* (see Section 8.1.8), will be reviewed and may be modified by District staff. The District will use accepted engineering principles, methodologies, and emissions factors. Only emissions reductions that are surplus, or in excess of what are required by regulation, will be considered when evaluating proposals. If submitted reductions estimates require staff adjustment, such adjustments will be used in all evaluation and funding decisions.

6.2 Program Funding Required and Resource Leveraging

The District will evaluate qualifying proposals based on the monetary and in-kind contributions from the project team and any third-party partners identified in the

proposal. The District will consider the amount of funding requested and the percentage of such funding in the total project.

The proposal budget should clearly identify the specific costs that will be covered by the Technology Advancement Program funding and other funding, including funding offered by the project team or a third party. Project selection may be contingent on the verification of unsecured funding sources, which may include other grants applied for, but not secured, or anticipated future investments.

6.3 Innovation and Technology Advancement

The District will evaluate qualifying proposals based on the innovativeness of the proposed technology and whether or not the proposed demonstration will help to significantly advance the commercialization of the technology. For new and innovative technologies that are not common in the Valley, but may have been used in other markets, the District will evaluate such proposals based on whether the proposed project will demonstrate technology applicability for Valley users under Valley conditions. In this case, additional business-case proof may be required to show how the demonstration will help to overcome barriers that may have inhibited technology transfer to the Valley.

6.4 Co-Benefits

Criteria pollutant emissions reductions relevant to the District's attainment plans are of primary importance; however, in addition, the District will evaluate benefits beyond reductions in ozone and PM2.5 precursors. These benefits may include reductions in air toxics emissions and other environmental benefits, especially when such benefits occur in dense population areas or sensitive population groups and are of benefit to general public health and consistent with the District's *Health Risk Reduction Strategy*. Co-benefits may also include reductions in greenhouse gases and significant cost savings to potential technology users. While co-benefits are not required, projects that provide cobenefits will score higher. Projects that increase criteria or other pollutant emissions may result in a negative score in this category.

6.5 Technology Cost-Effectiveness

The District will evaluate qualifying proposals based on the expected, **fully deployed**, **post-commercialization technology cost-effectiveness**. The dollars per ton of emissions reduced should include annualized capital costs and ongoing operating costs or savings incurred through use of the proposed technology. The methods for estimating future costs need to be clearly identified in the proposal or the accompanying attachments. **Poorly supported estimates will reduce the score in this category**. Evaluation of a technology's cost-effectiveness will also include general adoptability and benefits to potential endusers. A technology may be cost-effective from an emission reduction

perspective, but if a business case encouraging adoption by end users is not clearly presented, those emissions reductions may never be realized.

6.6 Project Readiness

The District will evaluate qualifying proposals based on the identification and inclusion of project partners during the planning and application process. As such, the District will consider applications with project partners as co-applicants more favorably than applications with casual letters of support from proposed partners. Supporting documentation (included as attachments to the proposal, see Section 8.1.10) should show commitments and availability of in-kind or matching funds from all project partners.

In most cases, project partners should be willing to enter into multi-partner agreements with the District and all other project partners if the project is selected for funding. This includes entities that will host demonstration of the technology; intermediate equipment suppliers, such as truck body manufacturers; technology manufacturers; and others that are critical to implementation of the project.

Other project readiness measures include the availability of facilities or equipment, any seasonal nature of the project, and availability of outside funding.

6.7 Ongoing Use of Technology in the Valley

Qualifying proposals that propose and ensure the continued use of the technology in the Valley after the demonstration will receive up to a five percent higher score than those that do not ensure such continued use.

6.8 Building Capacity at Local Colleges and Universities

The District will award extra credit to qualifying proposals based on the involvement of Valley colleges and universities. Proposals including such partnerships should clearly identify the institution's role in the Project Organization section (Section 8.1.6). The District will also consider the portion of the Project Budget (Section 8.1.5) that will be provided or used by a local institution, with higher scores being given to proposals in which funding is used to purchase durable goods, as opposed to covering labor costs. Extra credit for this category may be up to 10%.

7.0 Confidential Information

Proposals containing trade secret or confidential information must be received with a request for confidential treatment of information. District Rule 1030 (Confidential Information) governs the treatment of such information. The project team must separate information requested to be kept confidential into an

attachment, and should reference such information where necessary within the proposal. Air pollution emission data cannot be designated as confidential.

The District is required to comply with the provisions of the California Public Records Act set forth in California Government Code section 6250 *et. seq.*Accordingly, proposals selected for funding, excluding confidential attachments, will become public records upon execution of a grant agreement with the District. Similarly, quarterly reports, testing results, final reports, and other relevant deliverables resulting from the technology demonstration, with the exception of trade secret information, will become public records. The District expressly retains the right and obligation to independently determine whether documents or information provided to the District consists of non-exempt public records under the Public Records Act.

8.0 Response Submittal Requirements

8.1 Contents of Proposal

All proposals must be submitted using the following technical guidelines:

Page limit: 16 numbered pages, excluding attachments (see

Section 8.1.10) and required District forms (see

Section 8.1.1)

Page margins: 1 inch on all sides

Paper, ink: White, black

Font: Arial or Calibri, no smaller than 12 point

File Size: Electronic Submittal shall not exceed 10 megabytes

Within the confines of these technical guidelines the proposal must include or clearly address Sections 8.1.2 through 8.1.9, as detailed within this RFP. Proposals that do not follow the technical guidelines or do not contain the required sections may be excluded from the District's consideration and evaluation.

The District will consider all proposals as binding commitments (firm offers) by the project team to provide the proposed project by the identified personnel at the specified cost. Proposals will be binding for a minimum of six months. Proposals not selected in the first round of selections may be chosen for funding without reissuance of this RFP if additional funds are received or otherwise made available subsequent the initial selection. Should additional funding become available after six months, the District may select eligible projects from the remaining proposals; however, proposals may be awarded after six months only if selected project teams are capable of completing the project as originally proposed (adjustments to the proposed timeline will be permitted as necessary).

8.1.1 Required District Forms

To be considered a complete application, each proposal must include the following District forms with all required information:

- Application Cover Sheet(s) (includes DUNS number)
- Budget Summary Sheet (see Section 8.1.5 for instructions)
- Emissions Reduction Summary Sheet (see Section 8.1.8 for instructions)

These fillable PDF forms are included as Appendix B to this RFP. One copy of the *Application Cover Sheet* should be included for each co-applicant in the project team. Project partners not included as co-applicants must demonstrate intent to execute sub-agreements with the appropriate project applicant. Once this form is completed, it must be signed by the applicable signing authority and copied as a PDF, which is then included in the electronic PDF files as is required for final submission.

8.1.2 Table of Contents

Clearly identify the materials contained in the proposal by section and page number.

8.1.3 Executive Summary Page (Label as Section 1)

The first section of the proposal should be an executive summary that includes the following:

- A brief statement describing the project, overall approach, and specific objective(s)
- A summary of the project team's organization and experience related to the proposed project
- A summary of the project budget, including total project cost and funding requested
- The project period, including expected start and end dates

8.1.4 Project Proposal (Label as Section 2)

This section should contain a detailed project summary that includes the following:

- Description of specific tasks and methods to be undertaken
- Description of associated work products and deliverables for each task
- Detailed project schedule dividing the project period into
 - An implementation period covering the time equipment is fabricated, delivered, installed, etc.; and

- An operational period covering the technology demonstration and emissions testing and verification
- Detailed listing of all permits and their status, as applicable
- Description of the various roles of the project team
- Description of the project team's organization and experience related to the proposed project

8.1.5 Project Budget (Label as Section 3)

This section should contain a detailed project budget that includes the following:

- Description of the total project costs
- Requested funding to be provided by District, including a clear explanation of how the funding will be used by task
- Clear delineation of eligible expenses to be covered by the District and ineligible expenses to be covered by in-kind contributions or third-party resources, as discussed in section 4.2.2
- Source and amount of funding for remainder of project, including documentation of third-party funding, if any, as attachments
- Separate breakdown of funding to be used or provided by an educational institution
- A description of all resources leveraged by the project, including equipment, land used, and other in-kind contributions
- A list of the total number of hours and hourly billing rate for each level
 of staff, including a breakdown of the direct labor rate, overhead rate
 and amount, and fringe benefit rate and amount, to justify the proposed
 labor hours and labor mix
- Documentation committing third-party resources should be provided as attachments

This information should **also** be summarized in the *Budget Summary Sheet*, which is required for a proposal to be considered a complete application. The *Budget Summary Sheet* should represent a summary and combination of the Project Proposal (Section 8.1.4) AND Project Budget and identify funding requirements by task.

8.1.6 Project Organization (Label as Section 4)

Briefly describe the proposed project management structure, including the lead applicant, organization of the project team, project monitoring procedures, and facilities available. In the case where a project team member will manage a subcontractor for the demonstration, those relationships should be clearly defined in this section.

8.1.7 Assigned Personnel (Label as Section 5)

Identify the person(s) having primary responsibility (principals) for implementing the project. Discuss their professional and academic backgrounds, including all certifications and licenses held. Provide a summary of similar work they have previously performed. Describe the responsibilities and capacity of the technical personnel involved. Substitution of the project manager or lead personnel will not be permitted without prior written approval of the District.

8.1.8 Air Quality Benefit Analysis (Label as Section 6)

This section should contain a detailed analysis of the proposed technology's emission reduction potential. This analysis should contain all calculations and conversions necessary to complete the *Emissions Reduction Summary Sheet* (Appendix B). The detailed analysis should include the following:

- Emission reduction calculations for oxides of nitrogen (NO_X), reactive organic gasses (ROG) or volatile organic compounds (VOC), and particulate matter (PM_{2.5})
- Greenhouse gas calculations, even if the project results in a greenhouse gas dis-benefit
- Identification and quantification of any presence of and reduction in air toxics emissions relevant to the project
- Identification of tasks and deliverables from Project Proposal per Section
 8.1.4 that will verify the air quality benefit analysis presented in this section
- Citation of supporting materials for emission reduction claims per Section 8.1.10 (Attachments) and if appropriate, Section 7.0 (Confidential Information)

Use the following instructions to complete the Emissions Reduction Summary Sheet:

SECTION 1

This information should match the information provided on the *Application Cover Sheet*.

SECTION 2

This section should contain emissions information from the technology's primary activity use. Information should be provided for each type of pollutant (NO_X , ROG/VOC, $PM_{2.5}$, CO_2e).

Annual Primary Use. This field should indicate how much activity or use a typical piece of equipment (to be replaced or improved by the proposed technology) will get over a typical year. For example, a typical passenger vehicle may operate 15,000 miles per year. Ensure that the activity level is representative of what the proposed replacement or improved technology will allow. Appropriate units for this field include, but are not limited to, miles traveled, hours operated, gallons of fuel consumed, MWh produced.

Unadjusted Emission Rate of Baseline

Technology. This field should contain the average emission rate for the equipment or technology before applying any project improvements. The rate should be consistent with existing standards, such as modern vehicle emission standards or Best Available Control Technology (BACT) levels. Include appropriate units consistent with the Annual Primary Use field using a mass-per-unit-of-use convention, e.g. pounds of NOx per gallon of gas (lb/gal). Conversions from emission rates not in these units should be detailed in the Air Quality Benefit Analysis section of the proposal (e.g. conversion from ppm to lbs/MWh).

Unadjusted Annual Emissions of Baseline Technology. This number should represent the typical annual emissions of equipment capable of being replaced or improved by the proposed technology (Annual Primary Use multiplied by Unadjusted Emission Rate of Baseline Technology converted to pounds per year).

Improved Emission Rate with Advanced Technology. This field should contain the average emission rate for equipment replaced or improved by the proposed technology expressed in units matching the Unadjusted Emission Rate of Baseline Technology. Derivation of this emission rate should be included in the Air Quality Benefit Analysis section of the proposal. Additional supporting documentation

Improved Annual Emissions with Advanced Technology. This field should be the Annual Primary

may be included as an attachment to the proposal.

Use multiplied by the Improved Emission Rate with Advanced Technology converted to pounds per year. This number should represent the typical annual emissions of equipment replaced or improved by the proposed technology.

Annual Emissions Reduced by Advanced Technology. This field should be the Improved Annual Emissions with Advanced Technology subtracted from the Unadjusted Annual Emissions of Baseline Technology. A positive number represents an improvement in emissions as a result of the proposed technology. A negative number (which is possible for some pollutants) will represent an increase in emissions as a result of the proposed technology.

SECTION 3

This section is optional, as it may not be applicable to every project. Complete this section using the instructions for Section 2, replacing the Annual Primary Use with **Annual Secondary Use**. Examples of a secondary use include equipment startups, hours idling, etc.

SECTION 4

This section should contain totals of the **Annual Emissions Reduced by Advanced Technology** fields from Sections 3 and 4 expressed as pounds of emissions per year (lb/yr).

SECTION 5

This section should express the incremental cost of using the proposed replaced or improved technology compared to currently available technology.

Capital Cost. This field should contain the expected cost of purchasing the proposed technology over and above the cost of purchasing existing technologies used for the same purpose (incremental cost). Use the expected cost of the technology once commercialized, and detail the cost estimate assumptions in the Air Quality Benefit Analysis section of the proposal.

Technology Life. This field should contain the expected life of the equipment or technology.

Capital Recovery Factor. Use a capital recovery factor to annualize the true cost of the initial capital investment over the life of the equipment or technology.

Capital Recovery Factor (CRF) = $\frac{(1+i)^n \cdot (i)}{(1+i)^n - 1}$ Where: i = interest rate (use 2%)

n = technology life in years

| CRF for select n values | | | | |
|---------------------------------------|------------------|--|--|--|
| | Capital Recovery | | | |
| Technology Life | Factor | | | |
| 1 | 1.020 | | | |
| 3 | 0.347 | | | |
| 5 | 0.212 | | | |
| 10 | 0.111 | | | |
| 15 | 0.078 | | | |
| 20 | 0.061 | | | |
| Use formula above for CRFs not listed | | | | |

Annualized Capital Cost. Multiply the Capital Cost by the Capital Recovery Factor to determine the annualized capital cost.

Annual Expenses. Identify annual expenses for using the replaced or improved technology over and above what would be used for the baseline

technology. This value may be negative, if, for example, the new technology avoids the use of 20 gallons of gas per year.

Total Annual Cost. This field should contain the sum of the Annualized Capital Cost and Annual Expenses fields. If the proposed technology results in an overall annual cost savings, this number will be negative.

SECTION 6

This section contains the cost-effectiveness of the proposed technology based on data in the previous sections.

 NO_X only Cost-Effectiveness. Divide the Total Annual Cost from Section 5 by the annual NO_X emission reductions from Section 4.

NO_X+**ROG**+**PM**_{2.5} **Cost-Effectiveness.** Divide the Total Annual Cost from Section 5 by the Combined NO_X+ROG+PM_{2.5} annual emissions reductions from Section 4.

CO₂e Cost-Effectiveness. Divide the Total Annual Cost from Section 5 by the annual CO₂e emissions reductions from Section 4.

8.1.9 Capability and References (Label as Section 7)

Provide a summary of the project team's relevant background experience relative to the proposed project. Include examples of related projects completed for other parties that are of similar nature to the work requested herein with references. Please include telephone numbers and e-mail addresses of references.

8.1.10 Attachments

This section may include attachments necessary to support portions of the proposal including, but not limited to, support letters, resumes, or curricula vitae. Project partners not included as co-applicants must demonstrate intent to execute sub-agreements with the appropriate project applicant. Support materials included in this section may be referred to during the scoring process to verify claims made in the body of the proposal. Unsupported claims may result in reduced scores.

8.2 Proposal Submission

All proposals must be submitted according to the specifications set forth in section 8.1—Contents of Proposal and this section. Failure to adhere to these specifications may be cause for rejection of proposal.

8.2.1 Signature

All proposals shall be signed by the representative(s) of the project team authorized to enter into an agreement on the project team's behalf.

8.2.2 Due Date

Electronic versions (CD-ROM, DVD, or e-mail) of the proposals must be received at one of the addresses below (postmarks are not accepted), no later than 5:00 P.M. Pacific Time on August 29, 2014August 15, 2014, and shall be directed to:

CD-ROM or DVD: Chelsea Gonzales

Air Quality Specialist

San Joaquin Valley Air Pollution Control District

1990 E. Gettysburg Ave. Fresno, CA 93726-0244

E-mail version: **Technology@valleyair.org**

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

8.2.3 Proposal Format

All project teams shall submit an electronic copy of their proposal as a Portable Document Format (PDF) file or files. The electronic copy shall be in no more than three PDF files, and combined shall not exceed 10 megabytes.

If submitting a proposal using multiple PDF files, one shall contain the body of the proposal as defined in sections 8.1.1 through 8.1.9, the second file may contain those portions of section 8.1.10 that are not designated as confidential per section 6.0 (Confidential Information), and the third file may contain all material designated as confidential.

The portion of the electronic copy containing sections 8.1.1 through 8.1.9 must be in a searchable format. The electronic copy shall be emailed to: **Technology@valleyair.org** or mailed to the District's Central Office on a CD-ROM or DVD. Any other arrangements for delivery of electronic files must be made in advance and approved by the District.

8.2.4 Addenda

The District may modify the RFP or issue supplementary information or guidelines relating to the RFP at any time. If the District modifies the RFP, the modification will be posted on the District website. Project teams whose

proposals are received prior to a modification will be notified of the modification and will be allowed to submit a new proposal. However, if a new proposal is submitted, it must be received prior to the deadline. The new proposal will be evaluated in lieu of the prior proposal. The District will not review multiple proposals from a single applicant for the same project.

8.2.5 Grounds for Rejection

A proposal may be immediately rejected if it is:

- Received any time after the due date and time set for receipt of proposals
- Not prepared in the format prescribed
- Not signed by an individual authorized to enter into agreements on behalf of the organization

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

8.2.6 Disposition of Proposals

All proposals become the property of the District. Any proposal selected for funding will be included as an exhibit in the grant agreement, and at such time they are considered public information. This excludes attachments protected as confidential information pursuant to section 7.0.

8.2.7 Modification or Withdrawal

Once submitted, proposals, including the composition of the project 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 six months following the last day to accept proposals.

Request for Proposals Technology Advancement Program Demonstration Projects June 2014

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Request for Proposals Technology Advancement Program Demonstration Projects June 2014

Appendix A: Sample Grant Agreement

Note: Exhibit A will be the statement of work
Exhibit B will be the main body of submitted proposal
Exhibit C is dependent on funding source and not included

Request for Proposals Technology Advancement Program Demonstration Projects June 2014

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28 • This Agreement is made and entered into this _____ day of ______, 2013, by and between the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

AGREEMENT

CONTROL DISTRICT (District), a unified air pollution control district formed pursuant to

California Health and Safety Code section 40150 et seq., «CONTRACTOR NAME» (Contractor), and «HOST NAME» (Host).

WITNESSETH:

WHEREAS, despite major reductions in emissions and corresponding improvements in air quality, San Joaquin Valley continues to face difficult challenges in meeting the federal ambient air quality standards; and

WHEREAS, on March 18, 2010 the District's Governing Board adopted the Technology Advancement Program; and

WHEREAS, on September 10, 2012, the District issued Request for Proposal TAP12-01 seeking proposals for projects demonstrating new and innovative emission reduction technologies that have the potential for broad applicability in the San Joaquin Valley and will assist the District in meeting its air quality goals; and

WHEREAS, the United States Environmental Protection Agency (EPA) has awarded the District a grant agreement with agreement number «GRANT AGREEMENT NUMBER» to support a demonstration project; and

WHEREAS, on October 16, 2008, the District's Governing Board adopted Rule 4320 (Advanced Emission Reduction Options for Boilers, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/hr); and

WHEREAS, Rule 4320 provides an option allowing payment of an emissions fee rather than installation of additional NO_X controls; and

WHEREAS, fees collected under Rule 4320 are to be used by the District to fund projects which could achieve cost-effective emissions reductions; and

WHEREAS, Contractor has proposed to design, develop, install, and test a "TECHNOLOGY" system with the intent of removing "POLLUTANTS" emissions from "DEMONSTRATION EQUIPMENT" ("the Project"); and

WHEREAS, the Project meets the eligibility criteria of District that has been approved by District for funding; and

WHEREAS, Host has agreed to provide an acceptable host site that is an integral component and essential to the completion of the project; and

WHEREAS, through the Project, Contractor hopes to demonstrate that use of this technology is feasible and cost-effective in the San Joaquin Valley; and

WHEREAS, Contractor and Host represent that they are willing and able to perform the activities set forth herein.

NOW, THEREFORE, based on their mutual promises, covenants, and conditions, the parties hereby agree as follows:

1. PROJECT

Through this cooperative Agreement the District shall fund the demonstration of «TECHNOLOGY DESCRIPTION» and verify emissions benefits on «DEMONSTRATION EQUIPMENT» operating at «LOCATION».

Contractor shall design, develop, and integrate TECHNOLOGY system as set forth in the Statement of Work attached hereto and incorporated herein as Exhibit A, the project proposal submitted as a response to the Technology Advancement Program request for proposals number TAP12-01 attached hereto and incorporated herein as Exhibit B, and the District's EPA Award Agreement GRANT AGREEMENT NUMBER, which is attached hereto and incorporated herein as Exhibit C. Contractor agrees to provide Host with a fully operational system including all components and capabilities specified in Exhibit A and the project proposal. Contractor agrees to furnish all labor, materials, equipment, licenses, permits, fees, and other incidentals necessary to perform and complete per schedule, in a professional manner, the services described herein. Contractor represents that Contractor has the expertise necessary to

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SJVUAPCD 1990 East Gettysburg Fresno, CA 93726 (559) 230-6000 adequately perform the project specified in Exhibit A, Exhibit B, and Exhibit C.

Host shall provide and allow access to the host site, operate and maintain emissions treatment equipment, assist Contractor with its reporting obligations for the Project as described in Exhibit A, and support Contractor in the performance of its duties as described in this agreement. Host represents that it will operate the "DEMONSTRATION EQUIPMENT" in accordance with its regulatory permits in support of Contractor and will otherwise provide support to Contractor to perform the Project.

In the event of any conflict between or among the terms and conditions of this Agreement, the exhibits incorporated herein, and the documents referred to and incorporated herein, such conflict shall be resolved by giving precedence in the following order of priority:

- 1. The text of this Agreement
- 2. Exhibit A to this Agreement
- 3. Exhibit B to this Agreement
- 4. Exhibit C to this Agreement

2. FLOW-DOWN PROVISIONS

Contractor shall comply with the requirements of all lower-tier subcontracts entered into under EPA funding agreements as stated in District's agreement with EPA including, but not limited, to Administrative Conditions identified in Exhibit C, to the extent such requirements have been disclosed to Contractor in writing prior to the effective date set forth in the first paragraph of this Agreement.

3. PERIOD OF PERFORMANCE/TIMETABLE

Contractor shall commence performance of work and produce all work products in accordance with the work schedule and deadlines for performance identified in Exhibit A to this Agreement, unless this Agreement is terminated sooner as provided for elsewhere in this Agreement.

If requested by District, Contractor shall submit regular progress reports at intervals determined by District detailing the work performed during the current

reporting period; work planned for the next reporting period; problems identified, solved, and/or unresolved; and the percentage of each task completed. Host will support Contractor in its obligation to submit regular progress reports.

4. INTELLECTUAL PROPERTY OWNERSHIP AND TRADE SECRET INFORMATION

Each party shall retain all right title and interest in and to its own background intellectual property. For the purposes herein, background intellectual property shall mean all intellectual property that is conceived, developed, made, acquired or possessed by a party prior to or independent of the Project or this Agreement. The ownership of intellectual property arising out of this Agreement related to <a href="https://doi.org/10.2016/nc.201

Any party to this agreement disclosing Trade Secret Information (Disclosing Party) may request to have documents or portions of documents treated as confidential by the receiving party (Recipient). Where the Recipient is the District the treatment of Trade Secret Information shall be in accordance with the provisions in District Rule 1030—Confidential Information and the California Public Records Act. The Recipient shall not use or disclose Trade Secret Information of the Disclosing Party except as expressly authorized under this Agreement, or as required under the California Public Records Act, and shall take all reasonable and prudent measures necessary to protect the Trade Secret Information of the Disclosing Party. In the event that the Recipient is requested in any judicial proceeding or governmental investigation to disclose Trade Secret or a California Public Records Act request to disclose information that the other party considers Trade Secret Information is submitted, the Recipient will provide the Disclosing Party notice of such a request as soon as

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SJVUAPCD 1990 East Gettysburg Fresno, CA 559) 230-6000 practicable and will limit disclosure of such information to only information that is legally required to be disclosed.

Nothing herein shall be construed to eliminate the District's obligations under the California Public Records Act set forth in California Government Code section 6250 *et seq*. The District expressly retains its right and obligation to independently determine whether any information subject to a California Public Records Act request is required to be disclosed.

5. COMPENSATION

The total obligation of District under this Agreement shall not exceed

PROJECT FUNDING AMOUNT.

Contractor shall obtain, through other sources, sufficient additional monies to fund the total cost of the project as outlined in Exhibit B. Satisfactory written evidence of such funding commitments shall be provided to District prior to the release by District of any funds under this Agreement. In the event funding from other sources for the total cost of the project as outlined in Exhibit B is not received by Contractor, District reserves the right to terminate or re-negotiate this Agreement. In the event of termination or re-negotiation, if requested by District, Contractor shall return any District funds disbursed, but only to the extent that funds have not been earned by services rendered.

A. Payments

Advance payments shall not be permitted. Payments shall be permitted only at such time that equivalent services have been satisfactorily rendered. District shall reimburse Contractor after receipt and verification of a properly supported District Claim-for-Payment Form and, if necessary, inspection by District staff. Claims and all supporting documentation shall be submitted to the District's Strategies and Incentives Program.

Payment shall be made to Contractor by District upon submission and evaluation of District Claim-for-Payment Form, Contractor's invoice(s), and other

SJVUAPCD 1990 East Gettysburg Fresno, CA 559) 230-6000 supporting documentation that shall set forth the work completed pursuant to this Agreement, and as set forth in the section of Exhibit A entitled "Payment Schedule."

District will issue payment to Contractor within sixty (60) calendar days of receipt of proper documentation and verification that Contractor has satisfactorily completed the work for which compensation is sought.

The amount to be paid to Contractor under this Agreement includes sales and use taxes, if any, incurred pursuant to this Agreement, including any such taxes due on equipment purchased by Contractor. Contractor shall not receive additional compensation for reimbursement of such taxes and shall not decrease work to compensate therefor.

Concurrently with the submission of any claim for payment, Contractor shall certify (through copies of invoices issued, checks, receipts, and the like) that complete payment has been made or invoiced. In the event Contractor completes work internally, for which invoices, checks, receipts, and the like are not available, completion of the self-certification section of the District's claim-for-payment form is required.

District shall withhold payment equal to ten percent of each invoice until completion of work requested by the District on the tasks specified in Exhibit A. When the District has accepted final work as complete, the Contractor shall submit a final claim for payment for the retention withheld.

B. Surplus Funds

Any compensation not expended by Contractor pursuant to the terms and conditions of this Agreement by the project completion date shall automatically revert to District. Only expenditures incurred by Contractor in the direct performance of this Agreement will be reimbursed by District. Allowable expenditures under this Agreement are specifically established and included in Exhibit A attached hereto and incorporated herein.

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C. Closeout Period

Contractor shall submit all final claims within thirty days following acceptance and approval by District of the final report. No action will be taken by District on claims submitted beyond the 30-day closeout period.

6. FINAL DISPOSITION OF PROPERTY

Host shall retain title to all equipment purchased under this Agreement, including equipment paid for with District funds as well as Contractor's own cost-share contributions. Host agrees to make fiscally reasonable efforts to continue to operate and maintain emissions control equipment installed, and manage permit requirements resulting from the use of said equipment, so as to achieve long term emissions reductions, unless the device does not meet the metrics for successful project demonstration as defined in Exhibit A.

7. NON-ALLOCATION OF FUNDS

The terms of this Agreement and the services to be provided thereunder are contingent on the approval and receipt of funds by the appropriating government agency. Should sufficient funds not be allocated, the services provided may be modified or this Agreement terminated at any time by giving Contractor and Host written notice thirty (30) days prior to such modification or termination.

8. INDEPENDENT CONTRACTOR

In performance of the work, duties, and obligations assumed by Contractor and Host under this Agreement, it is mutually understood and agreed that Contractor and Host, including any and all of Contractor's and Host's officers, agents, and employees, will at all times be acting and performing as independent contractors and shall act in an independent capacity and not as an officer, agent, servant, employee, joint venture, partner, or associate of District. Furthermore, District shall have no right to control or supervise or direct the manner or method by which Contractor and Host shall perform their work and function. However, District shall retain the right to administer this Agreement so as to verify that Contractor and Host are

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| 9. TERMINATION

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matters the subject thereof.

A. Breach of Agreement

District may immediately suspend or terminate this Agreement in whole or in part where, in the determination of District, there is

performing their obligations in accordance with the terms and conditions thereof.

Contractor, Host, and District shall comply with all applicable provisions of law and the

rules and regulations, if any, of governmental authorities having jurisdiction over

shall have absolutely no right to employment rights and benefits available to District

employees. Contractor and Host shall be solely liable and responsible for providing to,

or on behalf of, their selves all legally required employee benefits. In addition,

Contractor shall be solely responsible and save District harmless from all matters

relating to payment of Contractor's employees and Host shall be solely responsible and

save District harmless from all matters relating to payment of Host's employees,

including compliance with social security, withholding, and all other regulations

governing such matters. It is acknowledged that during the term of this Agreement,

Contractor and Host may be providing services to others unrelated to District or to this

Because of their status as independent contractors, Contractor and Host

- 1. An illegal or improper use of funds;
- 2. A failure to comply with any term of this Agreement by Contractor or Host;
- 3. A substantially incorrect or incomplete report submitted to District by Contractor or Host; or
 - 4. An improperly performed service.

In no event shall any payment by District constitute a waiver by District of any breach of this Agreement or any default that may then exist on the part of Contractor or Host. Neither shall such payment impair or prejudice any remedy

SJVUAPCD 1990 East Gettysburg Fresno, CA 559) 230-6000 available to District with respect to the breach or default. District shall have the right to demand of Contractor the repayment to District of any funds disbursed to Contractor under this Agreement that, in the reasonable judgment of District, were not expended in accordance with the terms of this Agreement, due to a breach of agreement by Contractor, save and except any breach of agreement by Host. Contractor shall promptly refund any such funds upon demand. District shall have the right to demand of Host the repayment to District of any funds disbursed to Contractor under this Agreement that, in the reasonable judgment of District, were not expended in accordance with the terms of this Agreement, due to a breach of agreement by Host.

In addition to immediate suspension or termination, District may impose any other remedies available by law, in equity, or otherwise specified in this Agreement.

B. Without Cause

Any party may terminate this Agreement at any time by giving the other parties written notice at least thirty (30) days prior to termination. In such case, Contractor shall, subject to paragraph 5, be paid the reasonable value of all services satisfactorily rendered and actual, reasonable costs incurred up to the time of the termination. Upon such termination, all work produced by Contractor and Host shall be promptly delivered to District.

10. USE OF FUNDS RESTRICTION

Contractor and Host agree that funds under this award cannot be used for emissions reductions that are mandated under federal, state, or local law. This refers to specific compliance dates within the mandate, not when the mandate is passed. Voluntary or elective emissions reductions measures shall not be considered to be "mandated," regardless of whether the reductions are included in the state implementation plan of a state.

11. AUDITS AND INSPECTIONS

Contractor and Host shall, at any time during regular business hours, and

SJVUAPCD 1990 East Gettysburg Fresno, CA

559) 230-6000 of their records and data with respect to the matters covered in this Agreement. Contractor and Host shall, upon request by District, permit District to audit and inspect all such records and data necessary to ensure Contractor's and Host's compliance with the terms of this Agreement.

as often as District may deem necessary, make available to District for examination all

Contractor shall be subject to an audit by District or its authorized representative to determine if the revenues received by Contractor were spent for the reduction of pollution and to determine whether said funds were utilized as provided by law and this Agreement. If, after audit, District makes a determination that funds provided to Contractor pursuant to this Agreement were not spent in conformance with this Agreement or any other applicable provisions of law, Contractor agrees to immediately reimburse District all funds determined to have been expended not in conformance with said provisions.

Contractor and Host shall retain all records and data for activities performed under this Agreement for at least three (3) years from the date of final payment under this Agreement or until all state and federal audits are completed for that fiscal year, whichever is later.

Contractor and Host shall be subject to the examination and audit of the auditor general for a period of three (3) years after final payment under contract (Government Code § 8546.7).

12. FALSE CLAIM

Contractor and Host are advised that providing false, fictitious, or misleading information with respect to the receipt and disbursement of EPA or District grant funds may result in criminal, civil, or administrative fines and/or penalties. Contractor and Host, and their sub-grantees, must promptly refer to EPA's inspector general and the District any credible evidence that a principal, employee, agent, subgrantee contractor, subcontractor, loan recipient, or other person has submitted a false claim under the False Claims Act or has committed a criminal or civil violation of laws

pertaining to fraud, conflict of interest, bribery, gratuity, or similar misconduct involving funds provided under this grant or sub-grants awarded by the District.

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13. CONFLICT OF INTEREST

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No officer, employee, or agent of District who exercises any function or responsibility for planning and carrying out the services provided under this Agreement shall have any direct or indirect personal financial interest in this Agreement. Contractor and Host shall comply with all federal and state conflict-of-interest laws, statutes, and regulations, which shall be applicable to all parties and beneficiaries under this Agreement and any officer, agent, or employee of District.

14. GOVERNING LAW

This Agreement shall be governed in all respects by the laws of the State of California. Venue for any action arising out of this Agreement shall only be in Fresno County, California.

15. COMPLIANCE WITH LAWS

Contractor and Host shall comply with all federal and state laws, statutes, regulations, rules, and guidelines that apply to its performance under this Agreement, including California driving eligibility and financial liability laws.

16. MODIFICATION

Any matters of this Agreement may be modified from time to time by the written consent of all the parties without affecting the remainder.

17. NON-ASSIGNMENT

No party shall assign, transfer, or subcontract this Agreement, nor their rights or duties under this Agreement, without the prior express, written consent of the other parties, which shall not be unreasonably withheld or delayed.

18. INDEMNIFICATION

Contractor agrees to indemnify, save, hold harmless, and at District's request and at Contractor's sole expense, defend District, its boards, committees, representatives, officers, agents, and employees from and against any and all costs

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559) 230-6000 and expenses (including reasonable attorneys' fees and litigation costs), damages, liabilities, claims, and losses (whether in contract, tort, or strict liability, including, but not limited to, personal injury, death, and property damage) which arises directly or indirectly from any acts or omissions of Contractor, its officers, agents, subcontractors, or employees in their performance of this Agreement, or from use of the host site by Contractor.

Contractor agrees to indemnify, save, hold harmless, and at Host's request and at Contractor's sole expense, defend Host, its boards, committees, representatives, officers, agents, and employees from and against any and all costs and expenses (including reasonable attorneys' fees and litigation costs), damages, liabilities, claims, and losses (whether in contract, tort, or strict liability, including, but not limited to, personal injury, death, and property damage) which arises directly or indirectly from any acts or omissions of Contractor, its officers, agents, subcontractors, or employees in their performance of this Agreement, or from use of the host site by Contractor.

Host agrees to indemnify, save, hold harmless, and at District's request and at Host's sole expense, defend District, its boards, committees, representatives, officers, agents, and employees from and against any and all costs and expenses (including reasonable attorneys' fees and litigation costs), damages, liabilities, claims, and losses (whether in contract, tort, or strict liability, including, but not limited to, personal injury, death, and property damage) which arises directly or indirectly from any acts or omissions of Host, its officers, agents, subcontractors, or employees in their performance of this Agreement, or from use of the host site by Host.

19. INSURANCE

A. Without limiting District's right to obtain indemnification from Contractor and Host, or any third parties; and without limiting Host's right to obtain indemnification from Contractor; Contractor and Host, at their sole expense, shall each maintain, in full force and effect, the following insurance policies throughout the term of

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this Agreement:

- Commercial general liability insurance with minimum limits of coverage in the amount of two million dollars (\$2,000,000) per occurrence;
- Commercial automobile liability insurance which covers bodily injury and property damage with a combined single limit with minimum limits of coverage in the amount of two million dollars (\$2,000,000) per occurrence;
- 3. Workers' compensation insurance in accordance with California law.
- **B.** This insurance shall not be canceled or changed without providing the District written notice at least thirty (30) days prior to such cancelation or change taking effect.
- C. Except for workers' compensation insurance, such insurance policies shall identify District, its officers, agents, and employees, individually and collectively, and Host, its officers, agents, and employees, individually and collectively, as additional insureds for liability arising out of Contractor's or Host's work performed for District, including work performed by Contractor's officers, agents, subcontractors or employees. Such coverage for additional insureds shall apply as primary insurance and any other insurance or self-insurance maintained by District, its officers, agents, and employees shall be excess only and not contributing with insurance provided under Contractor's and Host's policies herein. Prior to the commencement of performing its obligations under this Agreement, Contractor and Host shall provide certificates of insurance and additional insured endorsements on the foregoing policies, as required herein, to District, stating that each policy has been obtained and is in full force to the coverage specified, and that the District, its officers, agents, and employees will not be responsible for any premiums on the policy. This insurance shall not be canceled or changed without written notice given to the District at least thirty (30) days prior to such cancelation or change taking effect.
 - **D.** In the event Contractor or Host fails to keep in effect at all times

insurance coverage as herein provided, District may, in addition to other remedies it may have, suspend or terminate this Agreement upon the occurrence of such event.

- **E.** If Contractor or Host is a government entity, then it may self-insure those risks identified in paragraph 19.A of this Agreement, provided, however, that:
- 1. Such self-insurance plans shall be reasonably satisfactory to District; and
- 2. All those provisions identified in paragraphs 19.B through 19.D of this Agreement concerning the relationship of Contractor's and Host's primary and District's excess insurance to each other, the requirement of Contractor and Host delivering a certificate of insurance or other suitable evidence to District, and the cancellation/change of insurance requirements shall apply to such self-insurance plans.

20. NOTICES

The persons and their addresses having authority to give and receive notices under this Agreement are as follows:

CONTRACTOR

«CONTRACTOR SIGNING AUTHORITY NAME»

" | «TITLE»

«COMPANY»

«ADDRESS»

«CITY», «STATE» «ZIP-CODE»

HOST

«HOST SIGNING AUTHORITY NAME»

«TITLE»

«COMPANY»

«ADDRESS»

«CITY», «STATE» «ZIP-CODE»

DISTRICT

Seyed Sadredin Executive Director/APCO San Joaquin Valley Unified APCD 1990 East Gettysburg Avenue Fresno, CA 93726

Any and all notices between District, Contractor, and Host provided for or permitted under this Agreement or by law shall be in writing and shall be deemed duly served when personally delivered to all of the parties, or in lieu of such personal service, when deposited in the United States mail, postage prepared, addressed to such parties.

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21. BINDING ON SUCCESSORS

This Agreement, including all covenants and conditions contained herein, shall be binding upon and inure to the benefit of the parties, including their respective successors-in-interest, assigns, and legal representatives.

22. TIME IS OF THE ESSENCE

It is understood that for Contractor's and Host's performance under this Agreement, time is of the essence. The parties reasonably anticipate that Contractor and Host will, to the reasonable satisfaction of District, complete all activities provided herein within the time schedule outlined in Exhibit A to this Agreement, provided that Contractor or Host is not caused unreasonable delay in such performance.

23. NO THIRD-PARTY BENEFICIARIES

Notwithstanding anything else stated to the contrary herein, it is understood that Contractor's and Host's services and activities under this Agreement are being rendered only for the benefit of District, and no other person, firm, corporation, or entity shall be deemed an intended third-party beneficiary of this Agreement.

24. SEVERABILITY

In the event that one or more of the provisions contained in this Agreement shall for any reason be held to be unenforceable in any respect by a court of competent jurisdiction, such holding shall not affect any other provisions of this Agreement, and the Agreement shall then be construed as if such unenforceable provisions are not a part hereof.

25. NO LICENSE

Unless otherwise specifically provided herein, nothing in this Agreement, whether express or implied, shall be construed as granting to any party any license with regard to Intellectual Property rights of the other party.

26. NON-WAIVER

Failure by any party to enforce any provisions of this Agreement or any

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SJVUAPCD 1990 East Gettysburg Fresno, CA 93726 559) 230-6000 rights that may arise as a result of breach of this Agreement by the other parties shall not be construed as a waiver of any of its rights, nor affect the validity of this Agreement, nor prejudice any party as regards any subsequent action.

27. SURVIVAL

All provisions of this Agreement that contemplate performance or observance following its termination of expiration shall survive its termination or expiration and shall bind the parties and their legal representatives, successors and permitted assigns.

28. FORCE MAJEURE

No party shall be responsible to the other parties by reason of failure to perform obligations hereunder (except for their obligation to remit payment) to the extent that the failure to perform is caused by an act of God, flood, fire, storm, earthquake, act of public enemy, or acts or omissions of any sovereign government, branch or agency thereof, and other similar events or contingencies beyond the reasonable control of the party whose performance is prevented or interfered with. The affected party shall promptly notify the other parties and shall not be responsible for its failure to perform an obligation required under this Agreement as a result of any of the foregoing.

29. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between Contractor, Host, and District with respect to the subject matter hereof and supersedes all previous negotiations, proposals, commitments, writings, advertisements, publications, and understandings of any nature whatsoever unless expressly included in this Agreement.

///

| | | | |

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| 1 | IN WITNESS WHEREOF, the partic | es hereto have caused this Agreement to be |
|----------|---|--|
| 2 | executed as of the day and year first h | ereinabove written. |
| 3 | | |
| 4 | CONTRACTOR Company Name | DISTRICT San Joaquin Valley Unified Air Pollution Control District |
| 5 | | 1 ondion control bistrict |
| 6 | Signing Authority | _ |
| 7 8 | Title | Hub Walsh Governing Board Chair |
| 9 | Host | Recommended for approval: |
| 10 | Company Name | San Joaquin Valley Unified Air Pollution Control District |
| 11 | | |
| 12 | Signing Authority Title | Seyed Sadredin |
| 13 | Title | Executive Director/APCO |
| 14 | | Approved as to legal form: |
| 15 | | San Joaquin Valley Unified Air Pollution Control District |
| 16 | | |
| 17 18 | | Annette Ballatore-Williamson District Counsel |
| 19 | | Approved as to accounting form: |
| 20 | | San Joaquin Valley Unified Air Pollution Control District |
| 21 | | |
| 22 | | Mehri Barati, C.P.A. |
| 23 | | Director of Administrative Services |
| 24 | | |
| 25 | | |
| 26 | | For accounting use only: |
| 27 | | Program: |
| 28 | | Accounting No.: |

SJVUAPCD 1990 East Gettysburg Fresno, CA 93726 (559) 230-6000 Request for Proposals Technology Advancement Program Demonstration Projects June 2014

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EXHIBIT A STATEMENT OF WORK FOR PROJECT «NUMBER»

As part of the 2007 Ozone Plan adopted by the San Joaquin Valley Air Pollution Control District (District) the District committed to a "black box" strategy to develop and demonstrate long-term measures for reduction of NO_X in the valley. One potential for reduction of NO_X is ***TECHNOLOGY DESCRIPTION***.

In this project Contractor will work with «PROJECT PARTNERS» to develop and demonstrate «TECHNOLOGY» for «SOURCE CATEGORY» in the San Joaquin Valley. Contractor will complete the design, fabrication, integration, testing, and real-world use of «TECHNOLOGY» on «DEMONSTRATION EQUIPMENT». The equipment will be placed into service in «LOCATION».

The Contractor shall perform the following tasks:

Task 1—«TASK1 DESCRIPTION»

- 1.1 «SUBTASK1»
- 1.2 «SUBTASK2»
- 1.3 «SUBTASK3»

DELIVERABLES: «DELIVERABLES»

Task 2—«TASK2 DESCRIPTION»

- 2.1 «SUBTASK1»
- 2.2 «SUBTASK2»
- 2.3 «SUBTASK3»

DELIVERABLES: «DELIVERABLES»

«ADDITIONAL TASKS AS PER PROPOSAL»

Deliverables

In addition to any deliverables identified in the statement of work, under this contract Contractor shall submit quarterly reports, a draft final report, and a final report to the District. Each report shall be stapled, unbound, printed in black ink, and printed double-sided on 8.5-by 11-inch paper. Additionally each report shall be submitted electronically in a standard document format, either portable document format (PDF) or Microsoft Word, version 2007 or later.

- 1. Quarterly progress or status reports are due one month from the end the calendar quarter. Each progress report shall include, but not be limited to, the following:
 - a. Reference to District contract number and title of project
 - b. Reporting time period (months, year)
 - c. Brief, overall project description
 - Description of work completed during the reporting period, including a discussion of problems encountered and how those problems were resolved, along with other relevant activities
 - e. Discussion of work planned for the next reporting period
 - f. Discussion of project status with respect to time schedule and steps being taken to resolve any delays
 - g. Costs-to-date status with respect to budget and tasks completed to date, including description of any major overruns
- 2. A draft final report for review, comment, and approval shall be submitted not later than "DUE DATE". Once submitted, this document shall be considered part of the public domain in conformance with the California Public Records Act (Government Code Section 6250 et seq.). Any trade secret information may be submitted to District in a separate report in which the trade secret information is specifically identified. District agrees to treat such trade secret information in accordance with District Rule 1030 relating to confidential information. If determined appropriate, Contractor shall also provide a presentation of the draft final report to "GROUP OR AGENCY" during "APPROPRIATE MEETING" after draft final report submittal. District shall complete its review of the draft final report within four weeks of its receipt from Contractor. The draft final report shall include, but not be limited to, the following:
 - a. Reference to District contract number and title of project
 - b. Project background and objectives
 - c. An executive summary up to three pages in length to include a short, definitive statement of the problem/project; objective of the project, including
 - emission control objectives or goals and reference to District Rules, if applicable;
 - subject of the project including the technology demonstration site, participants, dates, etc.;
 - conclusions (potential emissions impact, cost implications, and other factors);
 - recommendations (design changes/optimization, other applications of the technology, and commercialization paths); and

- acknowledgment of all project sponsors
- d. A detailed description of the scope of work
- e. Findings or results of each task
- f. Summary of all emission testing and analyses
- g. Costs as a summary displaying actual cost versus budgeted costs by task
- h. A discussion of significant problems, if any, encountered during the contract and how they were resolved
- 3. Contractor shall submit the final report, incorporating District comments, to District no later than **«DUE DATE»**. Once submitted, this document shall be considered part of the public domain in conformance with the California Public Records Act (Government Code Section 6250 et seq.). Any trade secret information may be submitted to District in a separate report in which the trade secret information is specifically identified. District agrees to treat such trade secret information in accordance with District Rule 1030 relating to confidential information.
- 4. Contractor shall submit a two-page project synopsis along with the final report. In addition to a hard copy of this synopsis, contractor shall provide the synopsis electronically using portable document format (PDF) or Microsoft Word, version 2007 or later.



Time Schedule

| Task No. | Description of Task | Estimated Completion Date | | |
|-------------|---------------------|---------------------------------|--|--|
| 1 | «TASK1 DESCRIPTION» | «DATE» | | |
| 2 | «TASK2 DESCRIPTION» | «DATE» | | |
| 3 | «TASK3 DESCRIPTION» | «DATE» | | |
| 4 | «TASK4 DESCRIPTION» | «DATE» | | |
| | | «DATE» | | |
| | Draft Final Report | «DATE» | | |
| | Final Report | «DATE» | | |



Payment Schedule

The total project budget is «AMOUNT». The District will fund the demonstration of an «TECHNOLOGY DESCRIPTION» for «SOURCE CATEGORY» and verify emissions benefits in application «DEMONSTRATION EQUIPMENT» in an amount not to exceed «AMOUNT». Payments will only be made for the completion of tasks as identified in the statement of work.

Payments must be completed and submitted to the District within sixty (60) days following the final month of activities for which payment is claimed or no later than **CDATE**.

| Description of Task | Estimated CFP Amount* | Estimated Date | | |
|-------------------------------|-----------------------------|-------------------|--|--|
| Task 2—«TASK 2 DESCRIPTION» | «AMOUNT» | «DATE» | | |
| Task 4—«TASK 4 DESCRIPTION» | «AMOUNT» | «DATE» | | |
| Task 5—«TASK 5 DESCRIPTION» | «AMOUNT» | «DATE» | | |
| Final Payout of 10% Retention | «AMOUNT» | «DATE» | | |

^{*}Claim-for-payment (CFP) amount does not include 10% retention



Metrics for Successful Project Demonstration

This project is expected to offer significant benefits to Contractor, Host, and the District. Greater project goals are identified in the proposal (Exhibit B) and the list of tasks above. It is anticipated that Contractor will demonstrate the commercial feasibility of a new wtechnology, the Host will retain the wtechnology, for several years, and Valley residents will benefit from significant real and quantifiable emission reductions. Operation and maintenance costs should be greatly reduced compared to alternative technologies, and Host will be able to operate the equipment.

The **«TECHNOLOGY»** is anticipated to meet an emission level of **«PROPOSED EMISSIONS LEVEL»**, as proposed in Exhibit B, which exceeds the **«EXISTING ALTERNATIVE»**. However, if this technology project does not demonstrate this level of emissions control there may still be real and meaningful benefits to the Host and the residents of the Valley. For the purposes of determining if the demonstration is sufficiently successful to warrant continued operation of the demonstrated emissions control equipment the following criteria will be used:

- 1. «METRIC 1»
- 2. «METRIC 2»
- 3. «METRIC 3»
- 4. «METRIC 4»

Request for Proposals Technology Advancement Program Demonstration Projects June 2014

Appendix B: Required District Forms

- Application Cover Sheet
 Budget Summary Sheet
- 3. Emissions Reduction Summary Sheet

Request for Proposals Technology Advancement Program Demonstration Projects June 2014

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Technology Advancement Program RFP: TAP14-01

Application Cover Sheet

This is a fillable PDF form. All information is required to be considered a complete application. Complete one copy for each co-applicant. Once complete, please print and sign.

Section 1 - Project Information

| Project title | | | | | | | | | |
|---|-------------------|-------------------------|--------------------------|--|--|--|--|--|--|
| Total project cost | Tota | Total funding requested | | | | | | | |
| Section 2 – Applicant Information | 1 | | | | | | | | |
| | Organization Inf | ormation | | | | | | | |
| Organization, company, or proprietor's name (as it appear | rs on Form W-9) | | DUNS number | | | | | | |
| Address | | | | | | | | | |
| City | | State | Zip code | | | | | | |
| Mailing address, <u>if</u> different from above | | | | | | | | | |
| City | | State | Zip code | | | | | | |
| | Primary Contact I | nformation | | | | | | | |
| First name | Last name | | Contact title | | | | | | |
| Primary phone number | Fax number | | Alternate contact number | | | | | | |
| E-mail | | | | | | | | | |
| | Signing Authority | Information | | | | | | | |
| First name | Last name | | Title | | | | | | |
| Phone number | E-mail | | | | | | | | |
| Section 3 – Certification | | | | | | | | | |
| I hereby certify that all information provided in this application and any attachments are true and correct to the best of my knowledge. I also certify that I have read the Request for Proposal and supporting documentation, including the sample contract and statement of work for the Technology Advancement Program. | | | | | | | | | |
| Printed name of signing authority | | | Title | | | | | | |
| Signature of signing authority | | | Date | | | | | | |







Technology Advancement Program RFP: TAP14-01

Budget Summary Sheet

This is a fillable PDF form. Information in all sections is required to be considered a complete application. This information should summarize the detailed Project Proposal (RFP Section 8.1.4) and Project Budget (RFP Section 8.1.5) submitted with the application.

| Section 1 – Project Information | | | | | | | | | |
|---------------------------------|---|----------|-------------------------|--|---------------------------|--|--------------------------|--|--|
| Organ | ization, company, or proprietor's name | | | | | | | | |
| Projec | t title | | | | | | | | |
| Total | project cost | | Total funding requested | | | | | | |
| Sec | tion 2 – Project Partners and Third-Party Funding | Sourc | ces | | | | | | |
| List al | l identified project partners and third-party funding sources, including pr | imary | | Anticipated Co | ontribution Type (inc | clude all that | apply) | | |
| | cant and other grants or incentives, but excluding potential District grant additional identified funding sources as attachment to this form) | funding. | Appli | cant Funds | In-kind services | s | Other (list type) | | |
| 1. | | | | | | | | | |
| 2. | | | | | | | | | |
| 3. | | | | | | | | | |
| 4. | | | | | | | | | |
| Sec | tion 3 – Project Costs by Task | | | | | | | | |
| List al | project tasks and associated costs for each task. Identify funding sources the | | | | ill require an invoice or | proof of payme | ent, e.g. equipment, | | |
| | raw from for each task/cost. Costs for a task can be split among funding source as other than District, list numbered funding source from Section 2. | es. For | | es, travel, etc. : require self-certifica | ation of expenditure, e. | g. labor, use of | existing inventory, etc. | | |
| Task # | Brief Task Description (Use second sheet, as needed) | Dist | rict (\$) | Other (\$) | Applicant/Partner (\$) | Funding Source # (all that apply from Sect. 2) | Total Task Cost | | |
| | | | | | | | | | |
| | Total task type I costs | | | | | | | | |
| | Total task type II costs | | | | | | | | |
| | | | | | | | | | |
| | Total task type I costs | | | | | | | | |
| | Total task type II costs | | | | | | | | |
| | | | | | _ | | | | |
| | Total task type I costs | | | | | | | | |
| | Total task type II costs | | | | | | | | |
| | | | | | | | | | |
| | Total task type I costs | | | | | | | | |
| | Total task type II costs | | | | | | | | |
| | Total task type I costs | | | | | | | | |
| | Total task type I costs | | | | | | | | |
| | Total task type ii costs | | | | | | | | |
| | Total task type I costs | | | | | | | | |
| | Total task type II costs | | | | | | | | |
| | | | | | | | | | |
| | Total task type I costs | | | | | | | | |
| | Total task type II costs | | | | | | | | |
| | Funding Course and Duciest Totals | | | | | | | | |







Technology Advancement Program RFP: TAP14-01

Emissions Reduction Summary Sheet

This is a fillable PDF form. Information in all sections is required to be considered a complete application. This information should summarize the detailed Air Quality Benefit Analysis (RFP Section 8.1.8) submitted with the application.

| Section 1 – Project Ir | nformation | | | | | | | | |
|---|-------------------|---|---|------------|--------------------------|---|----------------------------------|--|------------------------|
| Organization, company, or propr | ietor's name | | | | | | | | |
| Project Title | | | | | | | | | |
| Section 2 – Summary | y of Primary E | missi | ons | | | | | | |
| Annual Primary Use (units = hours, miles, gallons, etc.) | , | | ssion Rate of ne Technology | | nissions of echnology | Emission Rate Advanced Techr | | Annual Emissions with Advanced Technology | Reduced by Advanced |
| | NOx | | | | | | | | |
| | ROG/VOC | | | | | | | | |
| (All numbers must include | PM _{2.5} | | | | | | | | |
| associated units) | CO₂e | | | | | | | | |
| Section 3 – Summary | y of Secondar | y Emi | ssions (opti | onal) | | | | | |
| Annual Secondary Use (units = starts, trips, etc.) | | Emission Rate of Baseline Technology | | | nissions of echnology | Emission Rate with Advanced Technology | | Annual Emissions with Advanced Technology | Reduced by Advanced |
| | NOx | | | | | | | | |
| | ROG/VOC | | | | | | | | |
| (All numbers must include | PM _{2.5} | | | | | | | | |
| associated units) | CO₂e | | | | | | | | |
| Section 4 – Total Annual Emission Reductions Converted to Pounds per Year | | | | | | | | | |
| NOx Ibs/yr | ROG/VOC | lbs/yr | PM _{2.5} | lbs/yr | CO₂e | lbs/yr | Comb | ined NOx+ROG+PM _{2.5} | lbs/yr |
| Section 5 – Incremer | ntal Technolo | gy Co | sts | | | | | | |
| Capital Cost (\$) | Technology Life (| Years) | Capital Recov | ery Factor | Annualized | d Capital Cost (\$) | An | nual Expenses (\$) | Total Annual Cost (\$) |
| | | | | | | | | | |
| Section 6 – Technolo | gy Cost Effec | tivene | ess (dollars | per pour | nd) | | | | |
| NOx only Cost Effectiveness | | \$/lb | NOx+ROG+PM _{2.5} Cost Effectiveness | | | \$/lb | \$/Ib CO₂e Cost Effectiveness | | \$/lb |



