

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

**REQUEST FOR PROPOSAL**

The San Joaquin Valley Unified Air Pollution Control District (District) is seeking a qualified Contractor to establish a new near-road NO<sub>2</sub> air monitoring station at the District's designated site in Bakersfield, California located at:

**2001 Westwind Drive  
Bakersfield, CA 93301**

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Submittal: Five (5) hard copies and one (1) electronic copy of the proposal must be received at the address below on or before:

Monday, March 23, 2015 5:00 PM

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

Address to: Jennifer Ridgway  
Air Quality Specialist  
San Joaquin Valley Unified Air Pollution Control District  
1990 East Gettysburg Avenue  
Fresno, CA 93726-0244

Mark Envelope: "PROPOSAL – Near-Road NO<sub>2</sub> Air Monitoring Station in Bakersfield, CA"

Issuance Date: Thursday, February 19, 2015

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Request for Proposal**

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## **1.0 Overview**

The District's boundaries include the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, and the western and central portions of Kern County. The San Joaquin Valley Air Pollution Control District (District), State Agencies, Federal Agencies, and Tribes are responsible for operating air monitoring networks within the District's boundaries. In general, these air monitoring networks collect ambient air quality and meteorological data with the primary goals of demonstrating compliance with the National Ambient Air Quality Standards (NAAQS), and satisfying the need for a more comprehensive air quality database. Recently, and as an addition to the currently established monitoring networks in the District, the United States Environmental Protection Agency (EPA) has promulgated requirements to monitor air quality near major roadways, specifically nitrogen dioxide (NO<sub>2</sub>). Based on these requirements, the District must establish four (4) new near-road NO<sub>2</sub> air monitoring sites within its jurisdiction, which are to be located in the counties of San Joaquin, Stanislaus, Fresno, and Kern.

This Request for Proposal (RFP) is focused on seeking a qualified Contractor to build a near-road NO<sub>2</sub> air monitoring station in Bakersfield, CA in order to begin to bring the District into compliance with the current EPA NO<sub>2</sub> monitoring requirements. This project is scheduled for completion within 120 days after the City of Bakersfield, Caltrans, and other necessary agencies issue their respective permits.

## **2.0 Background**

This RFP solicits a proposal for a fully functional air monitoring station without instruments to be located in Bakersfield, CA. This station will primarily monitor nitrogen dioxide (NO<sub>2</sub>), but should be constructed to handle expanded monitoring capabilities to include PM<sub>2.5</sub>, ozone, carbon monoxide, and meteorological parameters. The proposed location is the Carney's Business Technology Center at 2001 Westwind Drive, Bakersfield, CA 93301. The entrance to the proposed location is on Westwind Drive. The exact location of the station will be identified by the District prior to the commencement of construction. Successful respondents to this RFP will have demonstrated proficiency in such work. Specifications are provided in Section 11 of this RFP. Images of the optimal air monitoring station configuration are provided in Section 16 of this RFP.

The District reserves the right to relocate the station at any time prior to construction commencement. If the District changes the station location, the Contractor will have the opportunity to modify the proposal amount. If the proposal amount is modified, the District will evaluate the new proposal amount and reserves the right to select a different Contractor if the revised proposal amount is not agreeable to the District.

The District will be available to meet and discuss project requirements and development at key times in the process.

### **3.0 Scope of Work**

The selected Contractor will be expected to use professional staff to complete the tasks. All staff must have all licenses and certifications available for the tasks they perform, worker compensation insurance covering them at all times that they are on site, and adhere to all applicable local, state, and federal regulations. The Contractor must demonstrate that he/she has the appropriate staff and/or Subcontractors as part of his/her team to accomplish the objective of the applicable components of this RFP and to comply with all legal requirements. The Contractor's team must include a Contractor licensed by the State of California to build and/or install the equipment shelter, electrical, and concrete pad as described in Section 11. The District recommends that a local Contractor be employed as a Subcontractor to obtain required permits and construct the cement pad as necessary. The proposal should include the Contractor's and Subcontractor's license numbers, and the Contractor must demonstrate that staff has the certifications, licenses, training, and experience appropriate for the project.

The air monitoring station design and construction must meet all federal and state OSHA safety requirements. All components described in Section 11 must be included. The design and installation of all safety equipment installed at the site must be approved by the District Safety Officer or other person designated by the District's Executive Director/Air Pollution Control Officer (APCO).

### **4.0 Work Products/Deliverables**

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

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

- Brief summary of last meeting, including list of attendees;
- Current status of work progress;
- Action items and significant upcoming tasks;
- Action items in progress; and
- Action items completed.

The Contractor must be willing to receive guidance and direction from the District and adjust procedures and methods.

- 4.3 **OBTAIN ALL NECESSARY PERMITS:** The Contractor will expeditiously obtain all necessary permits as specified by law, including building permits from city and county, permits from the Federal Communications Commission (FCC), Federal Aviation Administration (FAA), and other agencies as required. The shelter is to be constructed as close to the freeway as possible, which may require variances and/or special use permits to negate the standard set back requirements. The cost of acquiring all necessary permits including but not limited to permitting fees should be included in the proposal.
- 4.4 **CONSTRUCT STATION:** The Contractor will construct the air monitoring station as close to the freeway as possible. The air monitoring station shall be constructed and installed in a manner to ensure that it meets all applicable local, state, and federal regulations, requirements, and standards. The Contractor shall guarantee all work for a period of no less than 12 months after completion of work and acceptance of work by the District.
- 4.5 **ARRANGE FOR UTILITY CONNECTION:** The Contractor will coordinate with utility companies to bring power to the station. The Contractor is responsible for all aspects of the installation of power; shall contact the responsible companies and agencies for such services; and shall arrange for physical installation (including, but not limited to, trenching, permits, service pole(s), additional transformer(s), breaker boxes, conduit work, cabling installation and termination, etc.), as well as finding the location for connection and connection of such services.
- 4.6 **INVOICES AND PROGRESS REPORTS:** The Contractor will submit invoices in accordance with the requirements of a legally binding contract. The invoices must list the contract number and shall itemize all expenses incurred during the payment period completed. Each item in the invoice will correspond to one of the tasks. Direct labor charges and Subcontractor and Contractor charges shall be subdivided into the number of hours spent by each staff classification (e.g., project manager, instrumentation technician) for the invoice period.

The Contractor will be paid for the payment period within thirty (30) days of when the invoice and a progress report are deemed by the District to reflect and demonstrate work done in accordance with the contract.

## **5.0 Project Timeline and Schedule of Deliverables**

The District may amend the following tentative timeline for completion of work products. The Contractor may propose an alternative deliverable and payment schedule. If the Contractor would like an alternative deliverable and/or payment schedule, the revised alternative schedule shall be included in the proposal submitted. Payments must correspond with deliverables.

**TABLE 1**  
**Proposed Project Schedule of Deliverables**

<b>Action/Work Product</b>	<b>Approximate Date</b>
Release of RFP	February 19, 2015
Proposal Deadline	March 23, 2015
Contractor Selection	March 27, 2015
Contract To Governing Board	April 16, 2015
Contract Effective	April 16, 2015
Shelter Construction Complete	120 days after final permits are issued

## **6.0 Required Qualifications**

In order to be considered by the District, the Contractor must have a valid California business license; have worker's compensation coverage for all employees that would work on this project and 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.

The Contractor must demonstrate in the proposal by references or other methods that the Contractor has excellent working relationships with government agencies. In addition, the Contractor must demonstrate that the Contractor has extensive experience and expertise in the following areas:

- 6.1 Design and construction of air monitoring stations;
- 6.2 Placing air monitoring stations on site in functional condition; and
- 6.3 Obtaining necessary permits, special use permits, and variances from government agencies including, but not limited to, the city, county, FAA, FCC.

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

## **7.0 Response Submittal Requirements**

- 7.1 **CONTENTS OF PROPOSAL:** Submitted proposal must follow the format outlined below and all requested information must be supplied. Failure to submit all requested information may result in the proposal being deemed unresponsive and disqualified from consideration. The submitted proposals shall be limited to 24 pages, single sided or 12 pages, double sided, with 1" margins. The Proposal shall be printed on white paper with black Arial font no smaller than 12 point. The page limit applies to the body of the proposal only and does not include resumes or appendices. Failure to submit

proposals in the required format may result in elimination from proposal evaluation.

- 7.1.1 COVER LETTER: Must include the name, address, and telephone number of the company, total project cost, the name of the contact person for the proposal, and be signed by the person or persons authorized to represent the company. Submission of the proposal will be considered to be a binding commitment (firm offer) by the Contractor to provide the proposed services at the specified cost.
- 7.1.2 TABLE OF CONTENTS: Clearly identify material contained in the proposal by section and page number.
- 7.1.3 SUMMARY (SECTION 1): State the overall approach to the project and specific objective(s). Demonstrate a clear understanding of the project goal. Include total project cost and a list of general tasks to be performed to complete the project. Provide specific examples of steps to be taken to complete the project.
- 7.1.4 WORK PROGRAM (SECTION 2): Describe work activities or tasks to be performed including the sequence of activities and a description of methodology or techniques to be used.
- 7.1.5 PROGRAM SCHEDULE (SECTION 3): Provide projected milestones or benchmarks for all tasks and reports within the total time allowed. This program schedule must demonstrate that the project will be completed within 120 days after final building/construction permits are issued.
- 7.1.6 PROJECT ORGANIZATION (SECTION 4): Describe the proposed management structure, project monitoring procedures, organization of the contracting group, and facilities available.
- 7.1.7 ASSIGNED PERSONNEL (SECTION 5): Identify the principals having primary responsibility for implementing the project. Discuss their professional and academic backgrounds, including all certifications and licenses held. Provide a summary of similar work they have previously performed. List the amount of time, on a continuous basis, that each principal will spend on this project. Describe the responsibilities and capacity of the technical personnel involved. Substitution of the project manager and/or lead personnel will not be permitted without prior written approval of the District.
- 7.1.8 DISTRICT RESOURCES (SECTION 6): Describe any District services and staff resources needed to supplement Contractor activities to achieve identified objective(s).
- 7.1.9 SUBCONTRACTORS (SECTION 7): If Subcontractors are to be used, identify

each of them in the proposal. The Subcontractor's name and address must be included in the proposal. Describe the work to be performed by them and the number of hours or the percentage of time they will devote to the project. Provide a list of their assigned staff, qualifications, relationship to project management, schedule, costs, and hourly rates. Note that the Subcontractors must have all items listed in section 10.0 of this RFP except for the performance bond and the payment bond.

7.1.10 CONTRACTOR CAPABILITY AND REFERENCES (SECTION 8): Provide a summary of the company's relevant background experience. Discuss the applicability of background experience to this RFP. Include examples of related projects completed for other parties that are of a similar nature to the work requested herein with references. Please include telephone numbers and E-mail addresses of references.

7.1.11 COSTS OF PROPOSAL (SECTION 9): Identify all costs associated with the execution of this RFP. Agreements established from the proposal are considered to be fixed price, including sales tax (currently 7.5% for Bakersfield) and other miscellaneous expenses. The cost of each component that the Contractor is responding to must be specified along with any reduction in price if the District chooses not to have the Contractor complete the component. If the proposal includes multiple alternatives for the completion of a task the cost of each alternative should be listed separately (e.g. air conditioner or a heat pump).

7.1.12 CONFLICT OF INTEREST (SECTION 10): Identify any actual or potential conflicts of interest resulting from any contractual work performed, or to be performed, for other clients, as well as any such work done, or to be done, by proposed Subcontractors. Specifically, Contractors must disclose any recent or current contracts with the District, business entities regulated by the District, and/or any environmental or business interest group. In addition, Contractors must disclose any contracts with the District, public or private entities, which are scheduled to be performed in the future, or which are currently under negotiation. The District will consider the nature and extent of such work in evaluating the proposal (see Section 9.0 of this RFP).

7.1.13 ADDITIONAL INFORMATION TO DEMONSTRATE PREVIOUS EXPERIENCE (SECTION 11): Attach a description of any work prepared similar to what is requested in this RFP. These attachments will not be considered part of the 24-page limitation set for the proposal. Provide other essential data that may assist in the evaluation of this proposal.

## 7.2 Proposal Submission

All proposals must be submitted according to the specifications set forth in



Section 7.1 - "Contents of Proposal" and this section. Failure to adhere to these specifications may be cause for rejection of proposal.

7.2.1 SIGNATURE: All proposals shall be signed by an authorized representative of the Contractor.

7.2.2 DUE DATE: The Contractor shall submit an electronic copy of the proposal in Microsoft Word mailed to Jennifer Ridgway. The Contractor shall also submit five (5) complete hard copies of the proposal in a sealed envelope plainly marked in the upper left-hand corner with the name and address of the proponent and the words:

“PROPOSAL – Near-Road NO<sub>2</sub> Air Monitoring Station in Bakersfield, CA”

**Proposals must be received at the address below, no later than Monday, March 23, 2015 – 5:00 PM, and shall be directed to:**

Jennifer Ridgway, Air Quality Specialist  
San Joaquin Valley Unified Air Pollution Control District  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244

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

7.2.3 ADDENDA: The District may modify the request for proposal and/or issue supplementary information or guidelines relating to the RFP at any time. If the District modifies the request for proposal the modification will be posted on the District website. Contractors whose proposals are received prior to the proposal modification will be notified that a proposal modification has been made and will be allowed to submit a new proposal. However, if a new proposal is submitted the new proposal 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 Contractor.

7.2.4 GROUNDS FOR REJECTION: A proposal may be immediately rejected if it is:

- Received at any time after the exact due date and time set for receipt of proposals;
- Not prepared in the format prescribed; or
- Not signed by an individual authorized to represent the company.

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

awards.

7.2.5 DISPOSITION OF PROPOSALS: All proposals become the property of the District. Unless the Contractor specifically requests otherwise and the District approves such a request, all-proposals are considered public information.

7.2.6 MODIFICATION OR WITHDRAWAL: Once submitted, proposals, including the composition of the contracting team, cannot be altered without prior written consent of the District. All proposals shall constitute firm offers and may not be withdrawn for a period of thirty (30) days following the last day to accept proposals.

## **8.0 Estimation of Costs**

Costs must be itemized by the following categories:

8.1 TASK: List a total cost for each task. The District reserves the right to remove tasks if it is deemed necessary to remain within the budget, provides cost savings to the District, or is determined to be in the District's best interest;

8.2 LABOR: List an hourly labor rate for each assigned principal and technical specialist. The rate quoted must include labor, general, administrative, and overhead costs. The labor rate must adhere to all state and local requirement for projects funded with state or federal funds;

8.3 SUPPLIES AND EQUIPMENT: Provide an itemized list of supplies to be purchased or leased specifically for the program. The cost of each item shall be listed separately. The District will not pay for any equipment unless adequately justified. Any equipment paid for by the District will become the property of the District and shall be delivered to the District prior to the final payment being issued by the District or within thirty (30) days of when it is no longer needed by the Contractor for the project, whichever is first;

8.4 SUBCONTRACTOR COSTS: Identify Subcontractors by name, list their cost per hour or per day, and the number of hours or days their services will be used;

8.5 TRAVEL COSTS: Identify estimated travel costs, including the number of trips required, destinations, and approximate costs of travel. Travel costs are reimbursed at prevailing rates for the contracting company or District rates, whichever is lower, unless negotiated otherwise.

8.6 MISCELLANEOUS COSTS: If there are any miscellaneous costs these shall be specifically identified with the cost of each listed.

Total cost must be clearly indicated in the Costs of Proposal section of the proposal. It is expected that general overhead and administrative costs are included in the

hourly rate for labor. It will be assumed that all contingencies and/or anticipated escalations are included. No additional funds will be paid above and beyond the original quote given by the Contractor unless the site location is modified or District requests things beyond the scope of the original RFP **and** a new quote is submitted to **and** accepted by the District, **and** the District and the Contractor both sign a change order or contract amendment accepting the new quote. There is no guarantee that the District will approve any new quotes.

## **9.0 Proposal Evaluation and Contractor Selection**

For clarification purposes, during the selection process, District staff may interview Contractors with scores above a natural break. This may include interviews to confirm statements made within the proposal and clarify sections specified in the proposal. Contractors shall not provide new material at this time.

A contract will be awarded to the Contractor that in the sole discretion of the District is deemed to best and most cost-effectively meets the needs of the District. The District may choose not to award this contract if it is deemed that such action is in the best interest of the District. Failure to adhere to specifications in this RFP may be cause for rejection of the proposal.

The contract is subject to approval by the District's Executive Director/APCO and the Governing Board. All proponents will be notified of the results by letter after the Governing Board has approved a contract.

## **10.0 License/Insurance/Bond**

The Contractor and all Subcontractors used for the project shall have valid business licenses, valid certifications and licenses for the tasks they will perform (e.g. Contractor's license, electrician's license), and provide insurance coverage in amount acceptable to the District. Copies of all licenses, certifications, and certificates of insurance for the Contractor and all Subcontractors to be used on the project must be submitted prior to commencing any work on the project. The insurance shall be from an insurer acceptable to the District.

Before commencing any work on the project, Contractor shall furnish a faithful performance bond and a payment bond with good and sufficient sureties acceptable to the District in the sum of fifty thousand dollars (\$50,000) each.

10.1 Without limiting the District's right to obtain indemnification from the Contractor, all Subcontractors, or any third parties, the Contractor and all Subcontractors, at their sole expense, shall maintain in full force and effect throughout the term of the Agreement the following insurance policy(s):

10.1.1 Liability insurance for bodily injury, including automobile liability, with limits of coverage of not less than Five Hundred Thousand Dollars (\$500,000) per person and one million dollars (\$1,000,000) per

occurrence;

10.1.2 Liability insurance for property damage with limits of coverage not less than fifty thousand dollars (\$50,000) per occurrence;

10.1.3 Workers compensation insurance in accordance with the California Labor Code; and

10.1.4 Commercial general liability insurance with minimum limits of coverage of not less than one million dollars (\$1,000,000) per occurrence.

10.2 The foregoing insurance policy(s) shall not be canceled, reduced, or changed without a minimum of thirty (30) calendar day's advance, written notice given to District and written approval by the District to do so.

Each bond and insurance policy shall be listed as an item in the budget with an associated cost. If the bond or insurance policy cost is included in general overhead or will not be billed to the District, please note that in the line item and put "N/A" for the cost.

## **11.0 Project Requirements and Specifications**

The specifications and project design provided in this section shall be used by the Contractor. Images of the station configuration are provided in Section 16.0. Project requirements and specifications are as follows:

11.1 **MANAGEMENT:** The project manager will meet with District staff for an initial kick-off meeting and site visit within seven (7) days of signing of the agreement between the Contractor and the District. The Contractor is required to report on the project's progress in short, 15 minute or less, bi-weekly conference calls to the designated District contact.

11.2 **PERMITS & BUILDING CODE:** The Contractor and/or Subcontractors will obtain the appropriate building permits and any other permits from the city, county, and any other government agency required for the construction, installation, or operation of the equipment shelter, pad, or electrical service. The shelter is to be constructed as close to the freeway as possible that may require variances and/or special use permits to negate the standard set back requirements. All equipment and structures installed as part of this project must meet the following: Wind Load Design Factor of 75 MPH, Seismic Zone 4 (<http://www.seismic.ca.gov/>), and Exposure C building specifications (<http://www.bsc.ca.gov/>). To the extent required by law and pursuant to Chapter 1 of Part 7 of Division 2 of the Labor Code (commencing with Section 1720), Contractor agrees to comply with all prevailing wage requirements relating to the construction of the site improvements to be provided by Contractor, either by itself or through any Subcontractor.

11.3 CONCRETE PAD: If needed, based on the final selection of the location of the air monitoring station, the Contractor shall install a concrete pad for the monitoring shelter. The underlying soil is to be properly compacted to prevent settling of the slab. A layer of sand (1 inch minimum) is to be placed under the slab to minimize cracking from settling. The sand is to be wet down and compacted. The concrete pad shall be rectangular shaped with dimensions of 24 feet by 18 feet and a surface area of 432 square feet. The pad is to extend 2 feet beyond the exterior of the shelter in three directions and 6 feet in front. The concrete pad is to be a minimum of 6 inches thick and shall be at least 4 inches above the ground and/or raised sufficiently to be above the level of any standing water that may occur after a storm. The pad shall be constructed with a slight slope for water runoff. Composition is to be a “6 sack” mix, or better. No “filler material” such as broken concrete, etc. may be used in any fashion. Pad is to contain reinforcing, either “driveway mesh” or fiber reinforcement added at the batch plant. The pad is to have a trowel sweat or broom finish for slip resistance. Should the pad be improperly installed, the Contractor will remove and replace it at their expense. The design and location of the pad and shelter must allow room for the ARB audit van to be parked adjacent to the station to perform audits and have adequate outlets and support equipment to support operation of the ARB audit van.

11.4 EQUIPMENT MODULAR BUILDING: The Contractor shall install a modular building (no other type of building will be allowed). The modular building must conform to the following requirements and Contractors are encouraged to conform to all recommended and preferred specifications.

11.4.1 GENERAL BUILDING SPECIFICATIONS:

The modular building shall be 10 feet wide by 20 feet long and 8 to 9 feet high with a minimum 7.5 feet interior height.

Wood is not to be used in the framing of the structure; only steel studs shall be used.

The modular building shall have a weather resistant exterior finish of the District’s choosing (stucco, off white or tan). Exact finish of the modular building will be finalized between the Contractor, manufacturer, and the District prior to construction of the modular building.

The modular building shall be painted with at least two coats of exterior grade primer, and two coats of high quality finish paint. The exact color will be determined and approved by the District prior to construction.

The modular building shall have either R-21 insulation in the roof, floors, and walls **or** R-25 insulation in the roof and either R-19, R-21, or R-25 insulation in the floors and walls.

The modular building shall have one (1) 36 inches wide, 80 inches high (6'8"), and minimum 1 ¾ inches thick steel reinforced secure entry door. The door shall be full steel construction and not just steel frame. A Schlage (brand) double-cylinder deadbolt is to be installed in the door as well. The District will have the lock re-keyed after delivery. The hinges used are to be the type with index pins to prevent opening of a closed door through removal of the hinge pins. The doorframe is to have a good quality weather seal to keep moisture, dust, and insects out. The door shall face in a direction to be determined by the District prior to commencement of construction. For security, no windows within the doors or structure are to be mounted.

The enclosure will have entry ports for sample probes. Two ports will be of a 3-inch inside diameter (I.D.) pipe extending from the back of the box straight through the wall to the inside of the structure. The pipe shall extend through the wall approximately 2 inches. In addition, two roof ports shall be installed. These roof ports shall be compatible with the design of the sampler. A black ABS pipe port must be installed to act as an exhaust manifold. The exact location of the roof flanges and exhaust port will be determined in cooperation with the District contact. The roof hatch will be an OSHA compliant Roof Hatch System, 36 inches x 36 inches with Safety Post. The exact locations of the roof and wall flanges will be determined in cooperation with the District contact prior to commencement of construction.

The interior walls are to have a structural covering with a minimum thickness of 7/16 inches covered by wood veneer paneling. The District will accept paneling that combines both layers in one.

The load bearing capacity of the floor must be at least 150 pounds per square foot for the full length of the structure. The floor of the structure shall be made with ¾ inch exterior grade plywood. The floor is to be completely covered with high quality, commercial grade flooring tile (12-inch squares).

#### 11.4.2 LADDER SPECIFICATIONS:

The modular building shall include an internal permanent ladder mounted inside to prevent unauthorized access to the roof. Please note that exterior ladders will **not** be accepted and inclusion of an exterior ladder in the proposal may result in the proposal being disqualified from consideration.

The ladder shall include hand rails and shall meet all state and federal OSHA requirements and have a 400 pound or greater weight rating. The ladder shall be designed in a manner that enables easy and safe exit from the roof hatch onto the roof. The design must be approved by the District Safety Officer or other person designated by the Executive Director/APCO.

The ladder shall be located at one end of the modular building and below the roof hatch. The ladder roof entry must have a safety feature that prevents the personnel from falling through the hatch while it is open such as railing with a gate surrounding the roof hatch.

#### 11.4.3 GENERAL ROOF SPECIFICATIONS:

The roof must have adequate slope/grade to allow for rain run-off.

The roof must be able to hold a 1,000 pound total weight load.

The roof must be able to hold at least 100 pounds per square foot. Minimum thickness of the roof sheathing is  $\frac{3}{4}$  inch exterior grade plywood or oriented strand board (OSB) on roof supports, set a minimum 16 inch on center, and sufficient to support 100 pounds per square foot.

There must be a drip cap along the edge of the roof on each side. The modular building roof shall have guardrail approximately 4 feet high meeting federal and state OSHA standards completely surrounding the edges of the roof area with no gaps through which a person could walk through. A toe kick must be placed at the foot of the railings in a manner that allows one inch space between the roof surface and the bottom of the toe kick (to allow moisture to pass under the toe kick and not pool behind the toe kick – see picture at the end of this RFP). The toe kick must be OSHA compliant.

The roof and platforms shall be designed such that equipment can be mounted on the roof by District staff without voiding the roof warranty or affecting the weather-proofness of the structure.

The roof shall be covered with a non-slippery weather resistant material that is rough enough to enable a person to walk on it safely during days with freezing temperatures and icy conditions.

#### 11.4.4 GENERAL ELECTRICAL SPECIFICATIONS:

The modular building shall have power outlets, doors, lighting, etc., in locations determined by the District prior to commencement of construction.

The modular building shall have all exterior conduits constructed with metal and not plastic. The conduits shall be recessed into the wall.

The building shall have a 220 V 50 Amp receptacle on the exterior of the building. The desired receptacle shall be a Leviton 279 or similar model (see illustration at the end of this RFP). The roof shall have two electrical 120V 20 amp outlets; the exact location of the outlets will be determined by the District in consultation with the Contractor prior to commencement of construction.

A 150 Amp/220 Volt split phase sub-panel that meets all applicable state and federal electrical codes is to be placed inside the structure.

A 150 Amp/220 Volt electrical power panel with a 200 Amp/220 Volt calibrated meter is to be provided and wired by the structure manufacturer. This power meter will be mounted on the exterior of the structure and both the meter and the structure must meet all applicable state and federal electrical codes.

A subpanel with at least 16 circuit slots will be mounted on the interior wall of the structure.

The circuit breaker panel and outlets will be recessed in the inside wall or mounted to the wall in a manner approved by the District Safety Officer or other person designated by the Executive Director/APCO.

All breakers are to meet all state and federal electrical codes.

There are to be a minimum of eight separate 120 Volt outlet circuits inside the modular building; two of them to be twist-lock Nema L5-30 receptacles rated at 30 Amps each and mounted as close to the floor as possible with the exact location to be determined in cooperation with the District contact. The other six are to be wall mounted.

For the exterior walls there shall be one 20-amp circuit for a GFCI protected outside outlet and one 50 Amp 220 V connector. This is in addition to the outlets on the roof. The exterior receptacles are to be weather resistant and shall be installed on the side away from the door.

All power receptacles are to be commercial/industrial grade units.

All wiring is to be 12 gauge or better, solid copper and run through the wall, above the ceiling or beneath the floor.

All connections of the wire to the receptacles are to use only the screw



terminals on the sides.

Chrome smooth plated or metallic brushed finished metal covers shall be used on all outlets.

All wall outlets and electrical panels are to be flush mounted to the surface of the wall, as found in residences, and are to be mounted between 12 inches and 16 inches above the floor or are to be mounted to the wall in a manner approved by the District Safety Officer or other person designated by the Executive Director/APCO. The conduit where the primary power enters the shelter shall be located under the shelter, beneath the panel. Shelter must be grounded, separately from the other ground connections.

#### 11.4.5 GENERAL INSTALLATION SPECIFICATIONS:

The structure shall be securely anchored to the concrete pad via rustproof metal straps meeting a Wind Load Design Factor of 75 MPH, Seismic Zone 4, and Exposure C building specifications so that no movement can occur vertically or horizontally.

If required, the modular building shall be raised sufficiently off the ground to prevent flooding in case of a flood event. The modular building shall be installed such that one side is at an elevation of one inch higher than the other side of the modular building to facilitate drainage.

#### 11.4.6 WINCH:

The Contractor shall provide and install a winch with the building that meets all applicable state and federal OSHA requirements. The design must be approved by the District Safety Officer or other person designated by the Executive Director/APCO.

The winch must be able to carry at least 500 pounds from the ground safely over the guardrail.

The winch must be able to be operated by a single person.

The winch may be operated by a hand crank mechanism or by an electrical mechanism. In the proposal, the Contractor is encouraged to include the cost for both alternatives.

#### 11.4.7 AIR CONDITIONER:

The modular building is to have a wall mounted air conditioner (A/C) unit for both heating and cooling with 10 KW Heat Strips installed

inside the structure. It must include an electronic auto-changeover thermostat mounted 5 feet above the floor. The District's preference is a Bard Model #WA182 A/C unit or similar model. The outlet of the A/C will be distributed by two ceiling mounted registers, approximately 12 square inch each, which have flow-regulating levers.

Additionally the modular building is to have a backup A/C unit installed. The District's preference is to have this backup A/C unit mounted next to the main A/C unit. The backup A/C shall be a window type unit (that can be removed easily during transport) with 18,000 BTUs of cooling power. The backup A/C unit will be supported on the exterior of the structure with a metal housing designed for the unit. The bottom of both A/C units shall be about 42 inches from the floor.

Both the main and the backup A/C units must be a major brand such as Bard, General Electric, Westinghouse, Frigidaire, etc. Failure to propose and use a major brand model for the main and/or backup A/C unit may result in the proposal being scored lower than proposals that do offer these units.

#### 11.4.8 METEOROLOGICAL TOWER:

A 10 meter 2 section fold over aluminum tower with break winch will be installed at the site at a location determined by the District. All necessary guy wires, anchors, base, foundation and other equipment required by the manufacturer shall be installed as well. An alternative type of meteorological tower may be proposed based on the specific project location and monitoring needs.

A grounded lightning rod must be mounted atop the tower, above the instrumentation. The tower shall be independently grounded in accordance with all applicable electrical, local, and state regulations and guidance.

The tower installation will allow it to remain stable and plumb at the top when the tower is fully extended, and this must be accomplished without the use of guy-wires.

The tower must be attached to the shelter for added support. Care shall be taken to insure that the structure is properly reinforced at the points of attachment, using steel plates or other suitable support material. The tower is to be installed and inspected in accordance with the requirements of Kern County, the City of Bakersfield, the FCC, the FAA, and all other applicable codes.

The Contractor is responsible for obtaining a wet stamp engineered drawing of the tower from manufacturer ensuring the tower and tower footing/foundation construction meets or exceeds the 1997 UBC Code as amended by the 2001 California Building Code for one square foot wind load design factor of 75-mph, Seismic Zone 4, and Exposure C building specifications.

#### 11.4.9 OTHER SPECIFICATIONS:

Lighting will consist of no less than four (4) separate fluorescent fixtures. Each one is to be a four (4)-foot twin-tube light fixture. They are to be center mounted along each side of the structure. A switch next to the entrance door will control the front fixture and a second switch will control the other fixtures. The modular building shall have an exterior light fixture by door with interior switch to control its operation.

The Contractor shall provide and install a work desk running the full length of the enclosure, along the 10 foot wide wall. The desk will consist of 3 pull out drawers that are each 24 inches wide, a 30 inch wide base cabinet with hinged doors that each have two hinges, and an open space below the desk top on one end to act as a desk-type sitting area for working. The work desk shall be covered with a suitable protective covering (laminated or better).

The District will only accept proposals for a modular building that directly sits on the pad or is on supports on the pad. The cost of this modular building must include delivery and complete installation. The cost for a modular building will also include all California Department of Motor Vehicle fees if applicable.

- 11.5 UTILITIES: All installation work shall be performed according to published industry guidelines, rules, and regulations. If disputes occur, local, state, and national codes have precedence; then owner policies and procedures; then standards such as the Telecommunications Industry Association (TIA) and the Electronic Industries Association (EIA); then guidelines from firms such as Building Industry Consulting Services International (BICSI); then finally, manufacturer recommendations.

All communications cabling must be installed, tested, and certified to the carrier's specifications. This includes, but not limited to, conduit types and sizing, cabling type and pair count, and testing procedures and test equipment. Testing results and reports must be submitted to the District with final project documentation.

- 11.6 WARRANTY: All equipment, pad, structures, A/C and building shall be warranted against defects by the Contractor for a period of one year (12

months) after the three month check; after all repairs requested by the District have been completed; and after the District determines that the station is completely functional. Copies of all warranties including, but not limited to manufacturer and Contractor warranties, must be provided to the District.

A two (2) year construction warranty is required.

A two (2) year infrastructure warranty on the communication installation is required.

A one (1) year warranty is required for workmanship.

- 11.7 BOND: The cost of the \$50,000 performance and payment bonds shall be listed as separate line items in your proposal. If your firm must acquire professional liability insurance specifically for this project and it will result in an additional cost, Contractor may also show that as a separate line item cost.

## **12.0 Non-Debarment Certification**

The contract for this project will include the following language addressing non-debarment certification:

“CONTRACTOR certifies by signing the signature page of this original document and any amendment signature page(s) that the Contractor is not presently debarred, suspended, proposed for debarment, declared ineligible, voluntarily excluded from participation, or otherwise excluded from or ineligible for participation under federal assistance programs.”

## **13.0 Inquiries**

Technical and administrative questions concerning this RFP shall be directed to:

Jennifer Ridgway, Air Quality Specialist  
San Joaquin Valley Unified Air Pollution Control District  
1990 East Gettysburg Avenue  
Fresno, CA 93726-0244  
Phone: 559.230.6000  
E-mail: [jennifer.ridgway@valleyair.org](mailto:jennifer.ridgway@valleyair.org)

## **14.0 Confidential Information**

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

be rejected as non-responsive.

## **15.0 References**

Federal Register, Title 40 Code of Federal Regulations Part 53, [71 FR 61271, Oct. 17, 2006]

Federal Register, Title 40 Code of Federal Regulations Part 58, [71 FR 61296, Oct. 17, 2006, as amended at 75 FR 6534, Feb. 9, 2010]

United States Environmental Protection Agency, Air Monitoring Guidelines

Near-Road NO<sub>2</sub> Monitoring Technical Assistance Document, DRAFT, June 2011

## 16.0 Images of Monitoring Shelter and Support Equipment (Modular Building)



**Roof platform with roof hatch, safety railing, non-slip walkway, and toe kick**



### Safety railing and toe kick



### Safety railing and winch on roof platform



### Air conditioning units



### Interior work desk and shelves for monitoring equipment and other instruments





### 220 V Receptacle Used By ARB to Connect with Station (Leviton 279)

