

SECTION D – SPECIFICATIONS/SCOPE OF WORK

Scope of Work: The County's intent is to enter into a Contract(s) resulting from this solicitation with a qualified Contractor(s) to provide the County with purchase, installation, parts, service, maintenance and inspection of compressor systems and associated equipment. These compressor systems include fixed compressor systems. These systems will have air dryers as part of the compressor systems and automatic drain valves.

Contractor Qualifications:

- A. The Contractor must have current five (5) years' experience as a company working in the maintenance and repair of compressors. The contractor shall submit documentation demonstrating the current five (5) year experience, including company, address, contact person, telephone number, and term of contract, description and amount. The County will not accept the experience of individual employees or combinations of employees as company experience.
- B. The County will not accept the experience of individual employees or combinations of employees as company experience. The Contractor shall submit documentation demonstrating the five (5) year experience, including company, address, contact person, telephone number, and term of contract, description and amount.
- C. The Contractor shall submit documentation regarding its qualifications within 10 days of request by the County.

Contractor Responsibilities:

- A. The Contractor must perform all installation and/or repair services as requested by the County. Air filter replacement must be included within the bidder's bid. The Contractor must provide filters, and the County will reimburse the Contractor for air filter replacement at actual cost to the Contractor. The Contractor must replace the filter elements on the dryers. If there is a problem with any parts of the compressor or dryer, the Contractor must provide a quote to the County to service the problem. The County will decide if the service will be completed. The rotary screw compressors oil filter shall be replaced every 1,000 hours, the separator must be replaced every year, and oil shall be sampled every 1,000 hours, which can fall into the monthly check up. If there is a problem with any parts of the compressor or dryer the contractor must provide a quote to the County to service, the problem. The County will decide if the service will be completed.
- B. Compressor repairs, installations, and maintenance projects must be completed with County oversight. At no additional cost or obligation to the County, the County may request the recommendation of the Contractor. This may include recommendations regarding repairs or replacements (with and without warranty), evaluation of the current preventative maintenance program, and recommendations for any other possible modifications or improvements.
- C. The Contractor shall proceed with work only after all work specifications and cost estimates are approved and pre-work conference is completed. The Contractor shall examine the work to be performed and notify the County, in writing, of any unsatisfactory conditions. The work may not proceed until conditions are satisfactory to all parties.

- D. The Contractor shall maintain at all times the standard of operation, efficiency, safety, capacity, etc., of the equipment as designed and installed. It is the intent that interrupted service and degradation is kept to minimum through an adequate preventive maintenance program.
- E. All proposals (Work Plans) shall include the following information:
 - 1. Description of the proposed work
 - 2. Parts list (including Quantity, Type, and Cost)
 - 3. Expected labor hours and cost
 - 4. Total price
 - 5. Expected start and completion date
 - 6. Warranty information, if altered from Warranty
 - 7. Personnel expected to be on site (including security information of personnel, if necessary)
 - 8. Name and contact information of the supervisor on site, if needed
 - 9. Safety plan expected before/during/after the project.
- I. The Contractor is responsible for the disposal of all used and old material as a result of this Contract and must follow the County's guidelines for disposing of State property at no additional cost to the County.
- J. The Contractor is responsible for assisting with the handling of documentation, including updating the County's inventory records, for the distribution and disposal process of the equipment. Compensation for the administrative activities shall be included in the inspection and preventative maintenance fee as found in the Quotation Sheet.
- F. The County may modify, add, delete, replace, or upgrade compressors or compressor systems or associated equipment covered by this contract. It is not currently known what type or quantity of compressors will be amended in future modification(s) or through new activities. The County reserves the right to include additional compressors with this specification. The Contractor shall be compensated based on prorating prices and labor rates according to the Quotation Sheets or the County may also request a scope of work and cost proposal for the additional equipment at the option of the County. These changes may be incorporated into the existing contract by a mutual amendment.

Inspections, Testing and Preventive Maintenance:

- A. Routine inspections, testing and preventative maintenance work performed under this contract must be performed be accomplished Monday through Friday during regular business hours, as scheduled with the Contract Administrator or designee.
- B. The Contractor must develop and track an inspection and preventive maintenance (PM) schedule and coordinate the schedule with the County in a manner that assures a minimum loss of service during the maintenance periods.
- C. The proposed schedule must be submitted to the County for approval within 60 days of the contract start date.
- D. All inspections and preventive maintenance must be in strict compliance with the relevant equipment manufacturer's recommendations.

- E. The Contractor must perform all checks as required by the inspection and preventative maintenance schedules included in this contract. The Contractor must keep and maintain accurate maintenance and repair records. The Contractor must provide and maintain a maintenance service checklist at each compressor location. If this request is found to be impractical, then a tag must be attached indicating where such information may be found.
- F. The Contractor must make every effort to complete known necessary tasks, such as diagnostics, part replacements, etc., during PM's to avoid preventable downtime, additional appointments and expenses.
- G. All lubricants, hydraulic fluids, antifreeze, additives, etc. required while performing inspections, testing and preventive maintenance must be furnished and paid for by the Contractor at no additional cost to the County.
- H. Waste oil must be removed from the premises and disposed of properly by the Contractor as part of routine maintenance cost at no additional cost to the County.
- I. Monthly Inspections and Preventive Maintenance
 - 1. Preventive maintenance is defined as periodically scheduled work to provide systematic checking, adjustment, cleaning, and routine services as recommended by the equipment manufacturer. Labor that is part of a preventive maintenance program, as recommended by the equipment manufacturer, routine testing and inspecting equipment to reduce or avoid service interruptions and to obtain optimum operating efficiency and maximum life expectancy of equipment are included in the monthly preventative maintenance fee. Parts shall be compensated for in accordance with Labor, Extra Work and Parts Allowance.
 - 2. Preventive maintenance includes developing and recording equipment and system performance and inspection data for operational analysis and anticipated corrective action.
 - 3. The preventive maintenance section of this contract includes, but is not limited to, the performance of the listed procedures
 - 4. The monthly inspections shall include the following tasks at the minimum:
 - a) Check unit and record any unusual bearing noise, vibration, odor, corrosion, and structural damage.
 - b) Turn unit off at power disconnect.
 - c) Check fuses, tighten electrical connections, inspect for and repair damaged wiring on motor contactor as needed.
 - d) Check operation of bleed off valve.
 - e) Check pressure switch.
 - f) Bleed off tank(s).
 - g) Check and replace oil as required.
 - h) Lubricate motor bearings if they are not sealed bearings.
 - i) Inspect motor and shaft pulleys for wear and alignment.
 - j) Inspect belt condition, replace or adjust tension as needed.
 - k) Check that all belt guards are properly secured to unit.

- l) Clean grease and debris from air compressor unit.
 - m) Install anti-freeze as needed.
 - n) Check fluid levels on batteries.
 - o) Throw unit power disconnect switch to on position.
 - p) Inspect all exposed supply piping for leaks and report discrepancies.
5. Maintenance on compressors with air dryers must also include:
- a) Check for proper operation.
 - b) Check for proper charge.
 - c) Check and replace filters as needed.
 - d) Check A/C compressor (where applicable) for AMP draw to prevent premature failure.
 - e) Clean condenser coils.

Routine On-Call Repair Service:

- A. Routine work performed under this contract must be accomplished Monday through Friday during regular business hours, as arranged with the Contract Administrator or designee.
- B. If the Contractor is called during normal working hours the Contractor must be compensated on a routine hourly basis, but any work extending beyond normal hours must be compensated on an overtime basis as per the hourly rates found in the Quotation Sheet. Repair work started on regular time but finishing on overtime must be indicated on invoices.
- C. Overtime repair work, including callouts on Saturday, Sunday or holidays, must have prior approval of the County.
- D. This contract includes a callback service. The County may contact the Contractor 24 hours a day, seven days a week to report an equipment failure or malfunction within 30 days of inspection/servicing by the Contractor, and the Contractor must respond and initiate required corrective action within 24 hours at no additional cost to the County. The Contractor must notify the Contract Administrator or other appropriate individuals upon arrival and when the work is complete.
- E. The County must contact the Contractor and arrange a site visit to discuss the proposed work when routine compressor repair work is necessary. The Contractor must submit a written estimate according to the requirements listed in Contractor's Responsibilities and the unit prices found in the Quotation Sheet. Unless otherwise stated, the routine repair work must be scheduled to be performed during regular work hours.
- F. Unless otherwise instructed by the County, the Contractor must submit all estimates to the County within one (1) week of the County's initial work request. This time frame must include all necessary site visit(s) and third-party price quote(s). The estimate must include all necessary information as requested in Contractor's Responsibilities. The Contractor must be prepared to start the compressor repair work within three (3) business days or less upon the County's approval of the Contractor's estimate.

G. Inoperative Equipment:

1. Equipment breakdowns or shut-downs as a result of the following conditions must not be permitted to keep the compressor and equipment specified in this contract out of service longer than 72 hours (three full days) from the time of signing in by the Contractor's employees on site:
2. The Contractor will not be held responsible for internal parts of motor, motor block, or radiator, unless it is shown that it is caused by improper maintenance, negligence, improper adjustments, incorrect parts installed by the Contractor or his employees.

H. Service Tickets:

1. It will be the responsibility of Contractor's personnel to notify the Contract Administrator or designee on arrival at the service facility. A service ticket indicating adjustments made and part replaced on each inspection or emergency call must be left with Contract Administrator or designee on completion of work.
2. Service tickets in duplicate must be signed by the Contractor's certified Technician and contain date(s) of inspection or additional work, unit serviced, parts used, labor hours used, service/repairs provided, problems encountered, and additional work required. Distribution should be as follows:
 - a. One (1) copy will be kept as a part of the engine log at the location of the engine.
 - b. One (1) copy will be retained by the contractor.

Emergency Callout Work:

- A. Emergency maintenance and repairs is defined as unscheduled work, other than preventive maintenance, that requires immediate action to restore equipment or system operations, to correct technical problems that will cause imminent interruption of operations or will cause damage to operating equipment.
- B. The Contractor must be able to respond to an emergency call-out to make emergency repairs. The Contractor must be on call on an 8-hour, seven (7) business days per week basis and will provide an on-site response time of 8 business hours to the County on an agreed upon emergency response fee location on the Quotation Sheet. Emergency maintenance and repair service must be available throughout the contract term.
- C. In the event of equipment failure, or imminent failure or damage, on-site response by a qualified maintenance Technician must be made within 8 hours after the Contractor has been given notification of the emergency situation. Service response must be sufficient to restore the equipment. If temporary measures are taken to restore operation, then permanent repair service shall be completed within five (5) business days.

- D. Failure to respond within the time specified may result the County electing to employ an alternate Contractor to perform the necessary work.
- E. If the Contractor is called during normal working hours the Contractor must be compensated on a routine hourly basis, but any emergency work extending beyond normal hours or must be compensated on an overtime basis as per the hourly rates found in the Quotation Sheet..
- F. Timely response to a service request is essential. In the event the contractor fails to meet the applicable service response requirement(s) for a repair request, Liquidated Damages (LDs) shall be imposed at the discretion of the Contract Manager. In the absence of documented and accepted extenuating circumstances justifying the failure to meet the required response/restoration times, the contractor shall be assessed Liquidated Damages at the rate of \$50.00 per day per incident. The County reserves the right to exercise non-payment from the monthly invoice when the Contractor does not respond in accordance with and according to these contractual obligations. The County must be notified of potential service delays, so that the non-payment may be waived.

Purchase and Installation of New Systems:

Scope of Work (SOW) for the Replacement of Shop Air Compressor System and Associated Equipment

1. Project Overview The purpose of this work is to replace existing shop air compressor systems, including but not limited to, aftercoolers, dryers, piping, couplers, reels, and electrical hookups, to ensure a reliable and efficient compressed air system that meets the operational requirements of the facility.

2. Scope of Work The Contractor shall furnish all necessary labor, materials, tools, equipment, and supervision required to complete the following tasks:

2.1 Removal and Disposal

- Disconnect and remove the existing air compressor system and all associated equipment.
- Properly dispose of or recycle removed equipment and materials per local, state, and federal regulations.
- Ensure that all work is performed in a manner that minimizes disruption to ongoing facility operations.

2.2 Supply and Installation of New Equipment

- Furnish and install approved new air compressor system that meets or exceeds the specified performance requirements.
- Install associated equipment, including:
 - Aftercoolers
 - Air dryers (desiccant or refrigerated as specified)
 - Piping and fittings
 - Quick-connect couplers
 - Hose reels and associated accessories

- Ensure all equipment is installed per manufacturer specifications and applicable codes and standards.

2.3 Piping and Distribution System

- Adapt, repair, or install a new piping system to distribute compressed air throughout the facility.
- Use appropriate materials (e.g., copper, aluminum, or steel) as specified.
- Ensure all piping is secured, leak-tested, and properly supported.
- Provide necessary isolation valves, pressure regulators, and filters as required.

2.4 Electrical Work

- Utilize lock out methods before disconnect existing electrical connections and make safe before equipment removal.
- Provide electrical wiring and connections for the new compressor system, including power supply, control wiring, and grounding.
- Ensure compliance with the latest National Electrical Code (NEC) and local electrical codes.
- Perform start-up and verification of electrical operation.

2.5 System Testing and Commissioning

- Conduct system testing to verify proper operation of the air compressor and associated components.
- Check for air leaks and ensure all connections are secure.
- Adjust system settings for optimal performance.
- Provide documentation of all test results and adjustments made.

2.6 Training and Documentation

- Provide on-site training to designated facility personnel on system operation and maintenance.
- Supply operation manuals, warranty information, and maintenance schedules for all installed equipment.
- Deliver as-built drawings indicating equipment locations and piping layouts.

3. Compliance and Safety

- All work shall be performed in compliance with OSHA, ANSI, and local building codes.
- The Contractor shall implement appropriate safety measures, including personal protective equipment (PPE) and lockout/tagout procedures.
- Proper ventilation and fire prevention measures shall be in place during the execution of the work.

4. Warranty and Support

- The Contractor shall provide at a minimum one-year warranty on labor and installation.
- Equipment warranties shall be provided as per the manufacturer's terms.
- Provide technical support for troubleshooting and performance optimization during the warranty period.

5. Schedule and Completion

- The Contractor shall submit a detailed project schedule, including milestones for removal, installation, testing, and commissioning.
- Work shall be completed within the agreed timeframe to minimize downtime.
- Any deviations from the schedule shall require prior approval from the facility management.

6. Deliverables

- Removal and proper disposal of old equipment
- Supply and installation of new air compressor system and associated components
- Fully operational and tested air compressor system
- Training and documentation for facility personnel
- Warranty and post-installation support

7. Acceptance Criteria

- The system shall be fully functional and meet the required performance standards.
- All installation work shall be inspected and approved by facility representatives.
- Documentation and training shall be completed to the satisfaction of the facility management.

8. Responsibilities

- **Contractor:** Responsible for the complete execution of the project, including procurement, installation, testing, and training.
- **Facility Management:** Provide access to the site, review progress, and approve final acceptance.