

## **Statement of Work (SOW)**

### **1.0 SCOPE**

This is for the procurement and installation of six (6) clothes cleaning decontamination air showers at the Fleet Readiness Center Southwest (FRCSW) in Buildings 472 (one (1)), 468 (two (2)), 464 (one (1)), and 465 (two (2)) at Naval Air Station North Island (NASNI) in San Diego, CA (92135-7058). The vendor shall deliver, assemble, and install the clothes cleaning decontamination air showers and provide training, start-up, and commissioning on each as detailed herein. The clothes cleaning decontamination air showers will be used to remove heavy metal dust from employee's exterior clothing prior to the workers leaving their work area and/or prior to entering break room or lunchroom areas. Acquiring the clothes cleaning decontamination air showers is necessary in order to remain in compliance with applicable Occupational Safety and Health Administration (OSHA) regulations.

OSHA 29 CFR 1910.1027 requires the removal of heavy metal dust including but not limited to cadmium from employees' exterior clothing. In addition, the FRCSW's Industrial Hygienist Department, Industrial Environmental Division, and Occupational Safety and Health Department all have advised that the best solution and method to address dust removal from employee's exterior clothing is through the use of clothes cleaning decontamination air showers.

### **2.0 APPLICABLE DOCUMENTS**

The following documents form a part of this specification to the extent specified herein. In the event of a conflict between the text of these documents and the specification, the text in this specification will take precedence. All questions concerning applicable documents and references herein shall be directed to the FRCSW Designated Government Representative (DGR).

#### **2.1 Government Documents:**

- 2.1.1. OSHA Safety and Health Standard 29 Code of Federal Regulation (CFR) 1910.1027 (standard which applies to all occupational exposures to cadmium and cadmium compounds)
- 2.1.2 OSHA Safety and Health Standard 29, (CFR) 1910.242 (B) (standard that requires that compressed air be used for cleaning purposes be reduced to less than 30 PSIG (pounds per square inch gauge))
- 2.1.3 FRCSW Energy and Water Efficiency Instruction 11300.2F as applicable
- 2.1.4 National Fire Protection Association (NFPA) 70 - National Electrical Code (2008 Edition or latest)
- 2.1.5 FRCSW Drawing Layout Plans:
  - 2.1.5.1 Plan #97508, L10, Building 472 (Blast Shop)
  - 2.1.5.2 Plan #97508, LO7, Building 468, Bay 11
  - 2.1.5.3 Plan #97508, LO8, Building 468, Bay 12
  - 2.1.5.4 Plan #97508, LO4, Building 464, Bay 1
  - 2.1.5.5 Plan #97508, LO5, Building 465, Bay 5
  - 2.1.5.6 Plan #97508, LO6, Building 465, Bay 8

### **3. REQUIREMENTS**

Deliver, assemble, and install six (6) clothes cleaning decontamination air showers to include the following:

- 3.1 The clothes cleaning decontamination air showers shall consist of four (4) main parts:

- 3.1.1 Cleaning booth with single door
- 3.1.2 Air Reservoir (240 gallon tank)
- 3.1.3 Air spray manifold
- 3.1.4 Exhaust ventilation system
- 3.2 The interior dimensions of the cleaning booth shall be at least:
  - 3.2.1 42" (inches) long
  - 3.2.2 48" (inches) long
  - 3.2.3 84" (inches) high
- 3.3 The exterior dimension of the cleaning booth shall not be more than 4.5' (feet) wide and 9.5' (feet) long (4.5' x 9.5').
- 3.4 The artisan shall have enough space to rotate in front of the air nozzles to perform the cleaning process.
- 3.5 Intake shall enter the booth through an open grate above the door in the ceiling and flow down through the booth floor and exit on the bottom back wall.
- 3.6 The air reservoir shall supply the required air volume to the air nozzles used in the spray manifold.
- 3.7 The air reservoir shall be at least 240 gallons and have a maximum pressure rating of at least 150 PSI (pounds per square inch)
- 3.8 The air pressure shall be regulated to below 30 PSI before being directed toward the individual for the clothes cleaning.
- 3.9 The air spray manifold shall be composed of at least 27 spray nozzles spaced approximately 2" (inches) apart.
- 3.10 The bottom nozzle shall be located six (6) inches from the floor and is a circular designed nozzle for cleaning the artisan's work booths. This nozzle is used in conjunction with an adjustable ball-type fitting so that it can be directed downward. The other 26 air spray nozzles shall be flat fan sprays.
- 3.11 The 27 air spray nozzles shall deliver at least 450 CFM (cubic feet per minute). The average cleaning time shall be approximately 18 seconds.
- 3.12 The exhaust ventilation system shall be connected to the cleaning booth and capable of creating 0.02" (inches) of negative pressure in the booth at all times. This will insure that all of the dust removed from an artisan's soiled work clothes is contained within the booth before being exhausted.
- 3.13 Raised floor with heavy duty floor grade approximately 1/8" X 1 1/2" (inches)
- 3.14 The clothes cleaning decontamination air showers shall be classified as Underwriter Listed (UL) #698 for industrial control equipment for use in hazardous classified locations.
- 3.15 The clothes cleaning decontamination air showers shall be Class 1 Division 1 rated as per the National Electrical Code.

- 3.16 The clothes cleaning decontamination air showers shall vent to a “self-contained” High-Efficiency Particulate Air (HEPA) dust collection system to insure the exhaust is HEPA filtered.
- 3.17 The power requirements shall be 480 Volts Alternating Current (VAC)/3-Phase/60 Hz (hertz).
- 3.18 All motors shall have Variable Frequency Drives (VFD) with soft start protection.
- 3.19 The doors shall have aluminum frames and jambs, clear safety glass, full length piano hinge, and complete with heavy duty adjustable roller friction latches with replaceable compression rubber door seals on all sides of each door.
- 3.20 The door shall have a magnetic interlock.
- 3.21 The interior and exterior shell shall be made of steel or aluminum with a baked urethane paint finish, bright white inside, and with a dark blue hammer tone paint on the outside.
- 3.22 FRCSW site preparation responsibilities:
  - 3.22.1 Provide utilities within 25’ (feet) of the clothes cleaning decontamination air showers
  - 3.22.2 Any necessary floor preparation work
  - 3.22.3 Clear work area of any objects including but not limited to tools, boxes, and lockers
  - 3.22.4 Relocate eye wash stations
- 3.23 FRCSW contractor safety requirements:
  - 3.23.1 Steel toe safety shoes, eye protection, and hearing protection are required
  - 3.23.2 Shorts and tank tops are not permitted
  - 3.23.3 Cell phone use limited to outside of the building in the designated break areas
  - 3.23.4 Food and drinks are permitted only in the designated break areas
  - 3.23.5 Dispose of non-hazardous waste and minimize any foreign object damage (FOD) in open areas near active runways.
  - 3.23.6 Equipment Handling
    - 3.23.6.1 The contractor is permitted to use their own forklift in the immediate vicinity of the work site provided that the operator has the required license and certificate to operate the forklift.
    - 3.23.6.2 The contractor shall provide any rigging equipment/services in support of the requirement.
    - 3.23.6.3 FRCSW shall not provide equipment handling support without written authorization from the FRCSW DGR.
    - 3.23.6.4 The work site shall be marked and identified to alert and inform other facility occupants of the construction site.
- 3.24 Working hours
  - 3.24.1 Hours of operation are Monday through Friday from 0630 to 1430 excluding federal holidays and

“shut-down” periods.

3.25 Contactor parking

3.25.1 Contractors shall park only in approved parking areas. Contact the FRCSW DGR for information. Contractor vehicles must display identifying paperwork on the dashboard of their vehicles.

3.26 Training

3.26.1 The contractor shall provide two (2) days of operator and maintenance training for up to ten (10) FRCSW maintenance and production personnel.

3.26.2 Operator training shall include the following (for system and subsystem):

3.26.2.1 An overview and familiarization of the documentation and/or manuals which pertain to electrical and mechanical system operation and functions

3.26.2.2 Normal start-up and shut down procedures and emergency shut down and safety precautions controls

3.26.2.3 Operator system diagnostic testing and troubleshooting controls

3.26.2.4 Function and operation of all electronic and mechanical controls

3.26.2.5 Operator troubleshooting procedures with system analysis to include system corrections, recovery procedures, and emergency procedures

3.26.3 The contractor shall provide maintenance training for up to ten (10) FRCSW maintenance personnel.

3.26.4 Maintenance training shall include the following (for system and subsystem):

3.26.4.1 An overview and familiarization of the documentation and/or manuals which pertain to maintenance procedures, preventive maintenance, and diagnostic and analysis troubleshooting for all electrical/mechanical systems including system schematics and wiring diagrams.

3.26.4.2 Electrical and mechanical systems component and/or equipment servicing procedures shall include safety procedures and precautions

3.27 Deliverables

3.27.1 The contractor shall provide documentation and manuals for all the clothes cleaning decontamination air showers.

3.27.2 Documentation shall include the following:

3.27.2.1 Operating procedures

3.27.2.2 Maintenance troubleshooting and repair procedures including complete spare parts list

3.27.2.3 Calibration procedures and recommended calibration intervals

3.28 Responsibility for installation

3.28.1 The contractor shall be responsible for all equipment and labor required for unloading, rigging, moving, assembling, installation, and hook-up within 25' (feet) to the utilities of the clothes cleaning decontamination air showers.

### 3.29 Final acceptance test

3.29.1 After completing the installation the contractor and Government shall conduct a final acceptance test in accordance with the SOW and OSHA requirements. Should deficiencies exist in the final testing, the contractor shall take immediate steps to correct deficiencies and re-test. Upon successful completion of testing, the Government shall provide acceptance.

### 3.30 Project Management: post-award phases and schedule

#### 3.30.1 Preliminary Work Plan Review (PWR)

3.30.1.1 The contractor shall provide preliminary drawings and data for a PWR within 30 days of award and prior to any work being done or parts ordered for the installation

#### 3.30.2 Critical Work Plan Review (CWR)

3.30.2.1 A CWR shall be held within 60 days of award following the PWR as agreed upon at the PWR. The CWR shall be performed by the contractor with the FRCSW DGR. Approval of the work plan reviews and installation details is required before construction. The contractor shall provide facility, utility preparation, and schedule requirements at the PWR.

#### 3.30.3 Installation Phase

3.30.3.1 The contractor shall coordinate the installation schedule with the FRCSW DGR.

#### 3.30.4 Training Phase

3.30.4.1 The contractor shall provide training as outlined in this SOW before final acceptance of the equipment

#### 3.30.5 Acceptance Phase

3.30.5.1 Final acceptance is contingent on FRCSW DGR and Engineering, Fire, Safety, and Environmental Department approvals

#### 3.30.6 Final Closeout Phase

3.30.6.1 Upon final acceptance of the equipment the FRCSW DGR will notify the Contracting Officer of our final acceptance.

### 3.31 Period of Performance (POP)

3.31.1 The period for project completion is 90 days after contract award date. All work must be scheduled to be completed within this timeframe. Any modifications or extensions shall be requested through the Contracting Officer and FRCSW DGR.

### 3.32 Place of Performance

3.32.1 The selected vendor shall deliver and install all devices and components in accordance with this SOW at FRCSW Buildings 472, 468, 464, and 465 at Naval Air Station North Island (NASNI) in San Diego, CA (92135-7058). The contractor shall be responsible for all rigging and movement of the equipment. The vendor will be required to meet with the FRCSW DGR in Building 90-2 twice per month (day and time TBD) for a monthly status meeting.

### 3.33 Shipping Instructions

3.33.1 The clothes cleaning decontamination air showers shall be shipped, assembled, and installed at the

locations in Section 2.1.5. After the clothes cleaning decontamination air showers have been accepted by the customer and FRCSW DGR, the contractor shall complete Form DD250 for final acceptance.

#### 4. SECURITY AND BASE ACCESS

- 4.1 Upon award, the Contractor shall submit a letter requesting site clearance for all contractor personnel to:

FRCSW Security Department  
NAS North Island  
Building 94-1, Code 7.4  
PO Box 357058  
San Diego, CA 92135-7058

The letter shall include: the name(s), date of birth, place of birth, citizenship (if other than U.S. a copy of the resident visa), full Social Security number (SSN), contract number, and contract commencement and end date. The letter shall be required within five (5) days following contract award. Additionally, the Contractor shall send a copy of the clearance request to the FRCSW DGR.

- 4.2 Vetting will necessitate advance planning and the timely exchange of the cited and/or required information with the Government. For clarification, the procedure requires a minimum of ten (10) business days following receipt of the Personally Identifiable Information (PII) and may be subject to heightened requirements, without advance notice.
- 4.3 All personnel will be required to check-in at the Visitor Control Center (Building 680), which is located at the Main Gate point-of-entry to Naval Base Coronado (NBC), NAS North Island, San Diego, CA between the hours of 0630-1600. Following receipt of a clearance, personnel will then be required to coordinate with their sponsor (e.g. DGR) and obtain badges through the FRCSW Quarterdeck located in Building 94.
- 4.4 The FRCSW DGR is:

Mr. Daniel Cunniff  
Naval Air Systems Command (NAVAIR)  
Fleet Readiness Center Southwest (FRCSW)  
NAS North Island  
Building 90-2, Code 6.3.3.1  
San Diego, CA 92135-7058  
Phone: (619) 545-2340  
E-mail: [Daniel.Cunniff@navy.mil](mailto:Daniel.Cunniff@navy.mil)

#### 5. WARRANTY

- 5.1 A warranty shall be provided for a minimum of twelve (12) months (e.g. 365 Days) that follows “start-up, system(s) testing and acceptance/recognition of project completion by the Government. The warranty shall cover all parts and labor of the identified and accepted system and equipment. This means parts will be defect free for one (1) year under normal operating conditions. Replacement of said parts shall be at no additional cost to the Government. This shall include shipping, handling, and any removal or installation involved in the replacement of said parts. Additionally, the warranty shall name FRCSW as the owner of the equipment and/or related structures.
- 5.2 The warranty shall also include the following provisions:

5.2.1 Technical Support: A qualified technical representative shall provide telephone support during normal business hours, Monday through Friday (excluding Federal holidays or shutdown period) during the hours of 630 AM and 230 PM local time.

5.2.2 Availability: the Contractor’s technical staff must be available to provide support either in-person or via telephone at no additional charge and/or cost, to the Government. Additionally, it is incumbent upon the Contractor that support of specific issues and/or general inquiries must be provided within twenty-four (24) hours, following notification by the Government.

5.2.3 Single Point of Contact (POC): The Contractor shall provide/identify a single POC that can be contacted for support via telephone and electronic mail.

## **6. ASSUMPTIONS, ISSUES AND LIABILITIES**

6.1 The Contractor shall be expected to provide “supplies and services” in such a manner that minimizes the likelihood and/or potential for disruption of production activities at the Government facility. Work schedules that are influenced by either a federal holiday or shutdown period will be initiated or resumed on the next regularly scheduled Government work day.

### **6.2 Shipment and Storage**

6.2.1 The Contractor shall be responsible for the shipment and storage of all tools, materials, and supplies needed to complete all requirements that are the sole responsibility of the Contractor.

### **6.3 Monetary Amounts and Authorizations**

6.3.1 The Contractor is cautioned not to exceed the amount specified herein without receipt of prior written authorization from the Contracting Officer. Failure to comply with this requirement will result in rejection of the invoice.

### **6.4 Additional Costs**

6.4.1 FRCSW shall not be responsible for any additional costs associated with an option or addition that is not formally identified through the issuance of a formal amendment or modification by the applicable Government contracting office.

### **6.5 Monetary Limitations**

6.5.1 The Contractor will insure that all personnel involved in the scope of work order are aware of the monetary limitations.