

# **Bid Request for Self-Contained Breathing Apparatus**

**For the**

**City of Sioux Falls, South Dakota  
Sioux Falls Fire Rescue**

**Bid Request No. 15-0001**

**Prepared By:** City Purchasing Office  
City of Sioux Falls  
224 West Ninth Street  
P.O. Box 7402  
Sioux Falls, SD 57117-7402

**Instructions to Bidders and Terms and Conditions  
for Solicitations for the Invitation for Bid (IFB)**

**Supplies, Equipment, Materials, or Services**

1. **Purpose:** The purpose of this request is to provide the City of Sioux Falls with a contract for the purchase of supplies, equipment, materials, or services as specified herein.
2. **Instructions to Bidders:**
  - a. Thoroughly examine the drawings, specifications, schedule, instructions, and all other solicitation documents.
  - b. Make all investigations necessary to be familiar with conditions that affect the bid, such as, but not limited to, plant and facilities for delivery of material and equipment. No plea of ignorance by the bidder as a result of failure to investigate or examine conditions or failure to fulfill details of the contractual documents will be accepted as basis for varying the requirements of the City or changing the compensations due.
  - c. Provide all required information on the forms furnished. Print or type name on bid and **sign** all copies in the space and on the forms provided and upload to Mercury Commerce. Telegraphic, fax, email, and hand-delivered responses **will not be accepted** unless specifically authorized in the terms and conditions of the solicitation. By submission of a response, offeror affirms that no alteration of any kind has been made to this solicitation. Failure to sign the bid will render your bid nonresponsive.
  - d. Provide unit prices. Show your proposed delivery time (ARO days). Include weekends and holidays in counting days or months.
  - e. Do not include sales taxes as the City is exempt from payment of these taxes.
  - f. All prices quoted are to be FOB destination, City of Sioux Falls, Sioux Falls, South Dakota. Only FOB destination bids will be considered.
  - g. Use and/or excise taxes may apply to this contract and if so shall be the responsibility of the bidder. Bidders are encouraged to contact the South Dakota Department of Revenue for additional information on collection and reporting requirements. Contractors and subcontractors shall include any applicable tax in their bid price for each item.
  - h. All bids must be current and final at the time of opening in order to be considered responsive.
3. **Contract Period:** The contract period shall be from date of award through December 31, 2016.

4. **Completing the Bid Form:** All bids must be submitted on the bid forms provided in Mercury Commerce. Each bid must be signed by the bidder or authorized officer and uploaded and attached into Mercury Commerce to the bid solicitation that you are bidding.
5. **Quality and Brand:** The specifications included herein are the minimum specifications for each product. Bidder shall indicate brand names of products to be supplied. Any material delivered that does not meet or exceed the specifications as awarded will be rejected.
6. **Alternate Products:** Bids are invited on products equal or superior to the minimum specifications set out herein. Complete product literature must be attached for any alternates proposed. The City shall determine the suitability of any proposed alternates.
7. **Price Discrepancies:** Any discrepancies between the bid unit price and extension shall be resolved in favor of the unit price.
8. **Local Preference:** By virtue of statutory authority, preference will be given to materials, products, and supplies found or produced within the state of South Dakota. Bidders residing in South Dakota shall be allowed a preference over the bid of any bidder from any other state enforcing or having a preference for resident bidders, equal to such preference.
9. **Conflicting Federal Rules Govern on Subsidized Projects:** The letting of any public contract in connection with funds that are granted or advanced by the United States of America shall be subject to the effect, if any, of related laws of said United States and valid rules and regulations of federal agencies in charge or governing use and payment of such federal funds. Bid awards when federal funds are involved must be made to the lowest responsive and responsible bidder without regard to state preferential bid provisions.
10. **Bid Guaranty:** No bid guaranty is required for this solicitation.
11. **Method of Award:** This request will be awarded within thirty (30) days of the bid opening by written notice to the lowest total responsive and responsible bidder whose bid meets the requirements and criteria set forth in the invitation for bids. (All items must be bid.) The City of Sioux Falls reserves the right to reject any or all bids, waive technicalities, and make award(s) as deemed to be in the best interest of the City.
12. **Quantities:** The quantity indicated for each item in the specifications is estimated only, and the City reserves the right to order less or more as dictated by actual needs.
13. **Firm Prices:** Unit prices awarded shall remain firm for the entire contract period.
14. **Orders, Invoices, and Payments:** Purchase orders or government procurement cards will be issued/used at time of award and/or throughout the contract period for actual quantities ordered. Invoices or packing slips shall be submitted to the bill address indicated on each order. Payments shall be processed upon receipt of correct invoice (or normal procurement card process) after receipt and acceptance of each delivery.

15. **Questions:** All questions regarding the bid shall be directed to Purchasing, Third Floor, City Hall, 224 West Ninth Street, P.O. Box 7402, Sioux Falls, SD 57117-7402; telephone (605) 367-8013. If the Purchasing Division deems it of general interest, the answer shall be issued in written addendum to each vendor that has been sent a bid request.
16. **Withdrawal of Bids:** A bid may be withdrawn by the bidder by retracting their bid in Mercury Commerce prior to the opening date and time. No bid shall be withdrawn for a period of 30 (thirty) days after the bid opening.
17. **Federal Tax ID Number:** Each bidder shall state its federal tax identification number on the line provided on the bid form. The City is required to report to IRS on Form 1099 all payments involving labor or services provided by vendors, and lack of this number may delay contract payments until the number is provided.
18. **Proposal as Contract:** If awarded this request, the bidder's signature shall become a binding contract to furnish the proposed and awarded items when countersigned by the Mayor.
19. **Bid Results:** Results of bid openings on Thursday will be available immediately after the opening by visiting Mercury Commerce website at [esmsolutions.com](http://esmsolutions.com) or at [www.siouxfalls.org](http://www.siouxfalls.org). After an award has been made and signed by the Mayor, all bids and related information will be on file in Purchasing for public review. **Bid results are available via the Internet at [esmsolutions.com](http://esmsolutions.com). Sign in using your login and search the solicitation you want to view.**
20. **Nonappropriation of Funds:** In the event funds are not budgeted or appropriated for any fiscal year, purchase under this contract shall impose no obligation on the City of Sioux Falls and shall become null and void except as to the purchases agreed upon for which funds have been appropriated or budgeted, and no right of action or damage shall accrue to the benefit of the bidder/contractor, its successors or assignees, for any further payments.
21. **Right to Protest:** Any bidder who is aggrieved in connection with the award of a contract may protest. The protesting bidder shall file a written statement with the Purchasing Office during normal business hours, within seven calendar days of the date the Mayor signed the bid award document.
22. **Addendum:** Changes to the specifications of bid will be issued by addendum and sent to vendors on the bidder's invitation to the solicitation. The bidder will be responsible for acknowledging the addendum in Mercury Commerce and adjusting their price if necessary.
23. **Entering into Contract:** After receiving notice of a contract award, the successful bidder shall enter into a contract with the City within the time specified in the invitation for bids or request for proposals. If any bidder fails to timely enter into the contract, the contract may be awarded to the next lowest bidder unless all bids or proposals are rejected. The defaulting bidder shall be responsible for the difference in price.

24. **Recovery from Defaulting Bidder:** If any successful bidder fails to fulfill the conditions of an awarded contract, the City may proceed to recover from the defaulting party whatever damages may have been sustained as a result of the default. The City shall have all remedies provided in the contract and provided by law.
25. **Disallowance of Noncomplying Bid or Offer, Contracts in Violation Void:** Any bidder or offeror who fails to comply with the provisions of SDCL 5-18A, 5-18B, 5-18C, and 5-18D, or who provides any false information in the submission of any bid or offer is subject to having their bid or offer disallowed by the City. Any contract entered into in violation of SDCL 5-18A, 5-18B, 5-18C, and 5-18D is null and void.
26. **Civil Rights Requirements:** The successful bidder shall be subject to the provisions of Chapter 98 of the Code of Ordinances of Sioux Falls, SD. It is declared to be discrimination for the successful bidder, because of race, color, sex, creed, religion, ancestry, national origin, or disability, to fail or refuse to hire, to discharge an employee, or to accord adverse, unlawful, or unequal treatment to any person or employee with respect to application, hiring, training, apprenticeship, tenure, promotion, upgrading, compensation, layoff, discharge, or any term or condition of employment.

If the successful bidder is guilty of discrimination, this invitation for bid may be terminated in whole or in part by the City and the successful bidder shall be liable for any costs or expense incurred by the City in obtaining from other sources the work and services to be rendered or performed or the goods or properties to be furnished or delivered to the City under the invitation for bid so terminated or canceled.

Should the Sioux Falls Human Relations Commission in a proceeding brought as provided by the Code of Ordinances of Sioux Falls, SD, find that the successful bidder has engaged in discrimination in connection with this invitation for bid and issue a cease and desist order with respect thereto, the City shall withhold up to 15 percent of the contract price until such time as the Commission's order has been complied with or the successful bidder has been adjudicated not guilty of such discrimination.

The successful bidder will permit access to any and all records pertaining to hiring and employment and to other pertinent data and records for the purpose of enabling the Commission, its agencies or representatives, to ascertain compliance with the above provisions.

This section shall be binding on all subcontractors or suppliers.

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**Bid Request for**  
**Self-Contained Breathing Apparatus (SCBA)**  
**for the**  
**City of Sioux Falls Fire Rescue**

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# Technical Equipment Specifications for Self-Contained Breathing Apparatus (SCBA) and Associated Equipment

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## 1. Intent:

It is the intent of these specifications to provide NFPA 1981 and 1982, 2013 edition, compliant and certified self-contained breathing apparatus (SCBA) and associated equipment and options specified within this document to the City of Sioux Falls Fire Rescue (SFFR). The estimated purchase quantities are as follows for the life of the bid award (through December 31, 2016):

- One hundred and forty (140) 4,500 psi SCBAs.
- Two hundred and seventy (270) facepieces (masks) for the SCBAs.
- Two hundred and forty-five (245) 4,500 psi 45-minute bottles.
- Fifty (50) 4,500 psi 60-minute bottles.
- Six (6) Rapid Intervention Crew Kits.
- Ten (10) Confined Space Supplied Air Breathing Apparatus (SABA).
- Six (6) Air Purifying Respirator (APR) Adapter Kits.

The City of Sioux Falls reserves the right to reject any or all bids or any part thereof and to waive any minor technicalities. A contract will be awarded to the bidder submitting the lowest bid meeting the requirements of the specifications.

These specifications establish minimum specifications for SCBA and associated equipment and/or systems. SCBA will be designed for use as the highest level of respiratory protection for firefighters and first response emergency personnel for all fire and rescue (including structural), hazardous materials (including CBRN), urban search and rescue, and emergency medical services applications.

## 2. Equivalent Product:

Bids will be accepted for consideration on any make or model that is equal or superior to the specified. Decisions of equivalency will be at the sole interpretation of the City of Sioux Falls. A blanket statement that the equipment will meet all of the requirements will not be sufficient to establish equivalence. Original manufacturer's brochures of the proposed unit are to be submitted with the proposal.

All modifications made to the standard production unit described in the manufacturer's brochures must be certified by the manufacturer and submitted with the bid, or the bid will be deemed "nonresponsive" and rejected without further review. Bidder must be prepared to demonstrate a unit similar to the one proposed, if requested.

### 3. General:

The specifications herein state the minimum requirements of the City. All bids must be regular in every respect. Unauthorized conditions, limitations, or provisions shall be causes for rejection. The City will consider as "irregular" or "nonresponsive" any bid not prepared and submitted in accordance with the bid document and specifications or any bid lacking sufficient technical literature to enable the City to make reasonable determination of compliance to the specifications.

It shall be the bidder's responsibility to carefully examine and understand each item of the specifications. Failure to offer a completed bid or failure to respond to each section of the technical specifications (**comply** or **does not comply**) will cause the proposal to be rejected without review as "nonresponsive." All variances, exceptions, and/or deviations shall be fully described in the appropriate section. Deceit in responding to the specifications will be cause for rejection.

### 4. Interpretations:

In order to be fair to all bidders, no oral interpretations will be given to any bidder as to the meaning of the specification documents or any part thereof. **A prebid meeting will be held on Wednesday, December 17, 2014, at 10 a.m. at the Purchasing Conference Room, Third Floor, City Hall, for this purpose.** All other requests for interpretation shall be made in writing to the City Purchasing Division. Based upon such inquiry, the City may choose to issue an addendum.

### 5. Single Bid Response:

If only one bid is received in response to the invitation for bids, a detailed cost proposal may be requested of the single bidder. A cost/price analysis and evaluation and/or audit may be performed of the cost proposal in order to determine if the price is fair and reasonable. If the cost is determined to be unfair and reasonable, the City reserves the right to negotiate with the bidder.

### 6. General Conditions:

- 6.1 All equipment, options, and features provided must be designed, constructed, and installed to fully suit their intended use and purpose. All components must be new.
- 6.2 The SCBAs shall be equipped with all standard equipment as specified and by the manufacturer for the model of SCBA being submitted as a bid.
- 6.3 Bidders are required to state exactly what they intend to furnish; otherwise, it is fully understood they shall furnish all items as stated.
- 6.4 The successful bidder shall be responsible for delivering the units and associated equipment to SFFR. The units must be properly packaged, shipped, and ready to go to work.
  - 6.4.1 Equipment must be completely assembled (unless otherwise noted in these specifications), including options and attachments, and shall have been thoroughly tested and ready for operation upon delivery.



- 6.5 The selected vendor will have 30 days to deliver SCBAs and equipment purchased from this bid unless noted in No. 6.5.1. The 30 days will be from the time of purchase order receipt by the vendor for each order from the City of Sioux Falls Purchasing Division. All units and equipment ordered will be delivered to SFFR by the seller at no additional cost outside of the contract bid to the City of Sioux Falls.
- 6.5.1 The selected vendor will deliver the following equipment quantities from the first order to SFFR within seven days of contract or purchase order receipt:
- Twenty (20) SCBAs (as specified).
  - Forty (40) 45-minute SCBA bottles (as specified).
  - Twenty (20) SCBA masks (as specified).
- 6.6 The selected vendor will provide a manufacturer product trainer/expert to provide operational training to selected SFFR staff. The selected SFFR staff trained by the vendor/manufacturer rep will then train all of SFFR staff.
- 6.7 The selected vendor will provide certified level training to 12 SFFR personnel and certify those 12 to the manufacturer's version of a local repair technician (example, MSA SCBA Care Tech Certification). All costs, if any, for these certifications/courses including any travel expenses required by the manufacturer/vendor will be included in the overall bid price. No additional charges for this certification will be permitted.
- 6.8 The selected vendor will provide a manufacturer product trainer/expert to provide repair, maintenance, and troubleshooting training to selected SFFR staff. The trained staff will be certified by the manufacturer to perform maintenance, repairs, and troubleshooting in-house for SFFR to the level allowed by the manufacturer to not void/impair warranty coverage.
- 6.9 Any costs for upgrades/changes to the SFFR-purchased SCBAs that are needed for repair or update due to the manufacturer's changes of software, hardware, or design will be the responsibility of the vendor during the projected ten-year life of the SCBAs for SFFR.
- 6.10 All pricing for these specifications will remain in effect to purchase for SFFR until December 31, 2016. The bid will allow for more than one purchase or order from the vendor through these bid specifications and submittal/award.

## **7. SCBA Harness and Bottle Holder:**

- 7.1 The shoulder harness will have padded straps that are separate for each side for easier and less costly replacement. The shoulder straps will have friction pads to prevent slippage on the wearer's shoulders. The pads will have different colors to indicate which side is inside and which side is outside.

- 7.2 The shoulder harness will have reflective markings for visibility in low and no light conditions.
- 7.3 All straps associated with the SCBA will have a heat rating for color stability to 600°F and up to 40 washes without color change and all webbing will be made of Kevlar.
- 7.4 The shoulder harness will include a chest strap with rated plastic buckles.
- 7.5 The shoulder harness will have an attachment point for hanging of a mask or radio on each shoulder (one attachment point each shoulder).
- 7.6 The waist pad will be a swiveling pad to accommodate movement while working and automatically centers. The swiveling pad will be affixed to the backplate and not have a height adjustment.
- 7.7 The SCBA backplate will be designed to accommodate an adjustable waist pad and a rescue systems bail-out system if ever needed to be modified for organization operational changes.
- 7.8 The SCBA backplate will have three handles that are accessible with a gloved hand. Two handles will be on the sides of the backplate (one each side and one on the top of the backplate). The side handles will be capable of withstanding 500 lbs of pulling force and the top handle will be capable of withstanding 1,000 lbs of pulling force. The higher 1,000 lbs rating is for firefighter rescue operations including hoisting with rescue devices.
- 7.9 The SCBA backplate cylinder holder will use a metal band strap as the securing device for holding the SCBA bottle in place.
- 7.10 The SCBA waist strap will be of double pull forward design to allow quick and easy fit adjustment with gloved hands.
- 7.11 The SCBA waist strap will include a device for securing the second stage regulator when not in use. The holder will protect the regulator from being damaged at the connection point and accumulating excess dirt/grime. The device will allow the second stage regulator to be inserted at any angle to improve insertion ease.
- 7.12 The SCBA without mask and cylinder will not exceed 25 U.S. pounds.
- 7.13 The SCBAs and associated components shall be tested to and comply with the following standards:
  - NFPA compliance—NFPA 1981, 2013 Edition
  - NFPA compliance—NFPA 1982, 2013 Edition
  - NIOSH-approved under CFR 42, Part 84, for Chemical, Biological, Radiological, and Nuclear (CBRN)

- 7.14 The backplate will contain a single power module for the entire SCBA system. The power module will utilize alkaline or lithium-ion rechargeable batteries of the same size/type to power the pack. All components of the SCBA including alarms, lights, PASS, voice amplifier, HUD, and any other electric component will draw its power from this central module. Multiple battery locations and multiple battery types are not acceptable. Single battery location and type will decrease overall maintenance, safety, and cost of operation. The life of the battery pack (charged to dead) will last 120 days with a rate of use of two hours of use per day.
- 7.15 The SCBA will allow the change out of batteries from the centralized power module without removing the SCBA from the apparatus SCBA seat bracket.
- 7.16 The SCBA will contain a LED light that illuminates the universal RIC connection when the low air alarm activates or at approximately 35 percent.
- 7.17 The SCBA will contain colored LED lights that illuminate and indicate the level of the SCBA air supply. The colors will be green, amber, and red. Red will illuminate when the SCBA cylinder is in alarm mode and the air level of 35 percent or less. The lights will be positioned on the SCBA system to give 360-degree view/indication of the air supply status of the SCBA.

Comply  Does Not Comply

Deviation from Specification: \_\_\_\_\_  
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**8. Pressure-Reducing Regulators/Valves and Low-Pressure Warning Device:**

- 8.1 The system will consist of a primary (first) and secondary (second) stage regulator system to reduce air bottle pressures to breathable pressures per NFPA. The SCBA regulator system will be designed for use with 4,500 psi supply bottles.
- 8.2 The first stage regulator will reduce bottle inlet pressure to no more than 115 psi and the outlet pressure must be adjustable. The valve will also incorporate a downstream valve to ensure a fail-safe when valve is open. The valve will have a capable flow rate of 700 LPM when at full pressure.
- 8.3 The valve bottle connection will be of threaded design with the female receiver threads on the SCBA pressure reducing regulator/valve and the SCBA bottle will have the male threads. This will be a remote CGA threaded connection.
- 8.4 The first stage pressure reducing valve will be constructed of high-strength aluminum alloy and anodized with Teflon hard coat to minimize corrosion and wear of internal and external components. The valve or reducer will be a sealed system that does not allow moisture to enter valve components.

- 8.5 The first stage pressure-reducing valve will consist of no more than 45 individual parts to reduce parts stocking and maintenance. The valve will also not require any special tools for disassembly.
- 8.6 The first stage pressure-reducing valve will have at least one high-pressure accessory port and one medium-pressure accessory port.
- 8.7 The first stage pressure-reducing valve will have a low air or pressure bell alarm mechanism integrated. The alarm will be air actuated and ring continuously for audible warning when the SCBA bottle cylinder air pressure reaches 35 percent of its rated capacity pressure filled. Rated bottle pressure will be 4,500 psi filled.
- 8.8 The second stage regulator will be a SCBA mask mounted when in use and be of a demand type with a push to connect type fitting/connection to the SCBA mask. The regulator will be attached to a continuous supply hose from first stage regulator pressure reducer to second stage regulator.
- 8.9 The second stage regulator will decrease airflow pressure to a breathable pressure as specified in NFPA. The regulator will stop airflow when doffing or release from mask. The regulator will have a protective membrane to prevent permeation of CBRN agents and cross-contamination.
- 8.10 The second stage regulator will have a variable flow bypass that is easy to operate with a gloved hand.
- 8.11 The second stage regulator will have a hard front cover to house all components and prevent damage to the components. The regulator will not have a front-mounted purge valve.
- 8.12 The second stage regulator will house electronic modules to allow function of a HUD and microphone for voice amplifier. There will be no exposed wiring within regulator to allow electronic functions to operate.
- 8.13 The second stage regulator will have 35 or fewer parts that are easily replaceable without special tools in order to decrease maintenance and downtime.

Comply  Does Not Comply

Deviation from Specification: \_\_\_\_\_  
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## **9. Personal Alert Safety System (PASS):**

9.1 The PASS control module will have the following configuration and features:

- Analog and digital display for redundancy.
- The PASS module will have full color graphic display for ease of interpretation and reading in low light situations. The background light illumination will change color to match the tank volume and match the HUD color reading.
- The PASS module will be fully programmable and upgradeable for future upgrades, NFPA standard changes, and department operational changes.
- The PASS control module will have two easily accessible reset buttons and one easily accessible PASS alarm manual activation button all color coded.
- The PASS control module will provide data readout any time the module is moved to a reading position by the wearer (i.e., upright) or by manually pressing any functional button.
- The PASS control module will have a selectable readout for time remaining based on air consumption and remaining air in bottle.

9.2 The PASS will have a dual emitter alarm system capable of sounding at 100 dBa.

9.3 The PASS control module will be capable of storing the following data that will be downloadable by SFFR staff:

- On/off cycles.
- Any alarm activations, alarm resets, and any tagging events.
- Periodic cylinder pressures at 15-second intervals up to 25 hours of use.
- Service mode capability to store number of hours used.
- Storing unit name/riding position/name for tracking purposes.
- Will contain a system for asset and maintenance tracking for SFFR use.

9.4 The PASS control module will be immune to radio frequency interference and must function properly near public safety radios.

9.5 The PASS control module will have the following construction features:

- NFPA compliant protective case that is replaceable.

- Reusable perimeter gaskets at any removable covers to prevent water ingress while allowing for repair and/or upgrade of unit.

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Deviation from Specification: \_\_\_\_\_  
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**10. Instructions and Manuals:**

- 10.1 A comprehensive manual will accompany all SCBAs and associated equipment purchased and include all aspects of use, care, and maintenance. A quick-start guide and easy reference card covering basic SCBA operation. Online or delivered video training including SCBA use, care, and maintenance with available certification of the materials and training by the manufacturer of the SCBAs and equipment.

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Deviation from Specification: \_\_\_\_\_  
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**11. Heads-Up Display (HUD):**

- 11.1 The HUD will be integrated into the SCBA system and not be an exterior attached or separate component. This will ensure no increase in SCBA facepiece profile, weight, or snag hazards.
- 11.2 The HUD will be powered from the central power supply located in the SCBA backplate.
- 11.3 The HUD will be immune from radio frequency interference as is the PASS control module.
- 11.4 The HUD will be immune from cross-transmitting of data from one HUD to another HUD preventing misinformation of air levels remaining.
- 11.5 The HUD will be capable of displaying air bottle level/pressure indicators and status indicators. Status indicators will include the following:
  - Low battery life.
  - PASS alarm status.

- Evacuation alerts.
- Secondary alarm indicator.

The air bottle level/pressure indicator will include the following:

- A four-light, three-color system that indicates the amount of air left in the bottle from 0–35 percent, 36–50 percent, 51–75 percent, and 76–100 percent.
- The lights will use three different colors to indicate levels: red (0–35 percent), amber (36–50 percent), and green (51 percent and above).

The air bottle pressure/level indicator lights and the status indicators will be separated in the SCBA mask for easy identification and viewing.

- 11.6 The HUD indicator lights will adjust for ambient lighting conditions by adjusting intensity of display light.
- 11.7 The HUD lights or an additional indicator system will be visible by other personnel for partner status monitoring.
- 11.8 The HUD shall be field replaceable without any special tools.

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Deviation from Specification: \_\_\_\_\_  
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**12. Voice Amplifier or Speaker Module:**

- 12.1 The voice amplifier will provide for amplified speech while wearing the SCBA with mask. The amplifier will compensate for breathing noise when on air. The amplifier will provide voice amplification of at least 70 dBa.
- 12.2 The voice amplifier system will be powered from the centralized power module for the entire SCBA system located in the backplate. The voice amplifier will activate and deactivate with the PASS control module powering on/off. The voice amplifier system will also have a manual switch to turn on/off the voice amplifier by the wearer if desired. The voice amplifier will have a light on the unit to indicate if the voice amplifier is turned on.
- 12.3 The amplifier system will be fully tested and certified to applicable NFPA standards for heat and immersion leak testing.

12.4 The voice amplifier will be located on the chest and moveable to either the right or left side without special tools. Voice amplifiers attached to the facepiece that increase facepiece profile or increase snag risk will not be acceptable.

Comply  Does Not Comply

Deviation from Specification: \_\_\_\_\_  
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**13. Universal Air Connection (RIC connection) and Emergency Escape Breathing System (EEBS or Buddy Breather):**

13.1 The SCBA will have a universal air connection or RIC air connection located within 4 inches of SCBA air bottle connection.

13.2 The connection will be illuminated by an LED light when the low air supply alarm activates.

13.3 The connection will be capable of the following:

- Refilling in an IDLH atmosphere.
- Transfilling between two SCBA wearers.
- Providing emergency breathing system while maintaining NIOSH approvals.
- Quick refilling from compressor, RIC air, or cascade.

13.4 The SCBA will have an emergency escape breathing system (buddy breather).

13.5 The EEBS will be carried in a waist belt harness.

13.6 The EEBS will be attached to the intermediate air connection of the SCBA downstream of the pressure reducer or first stage regulator.

13.7 The EEBS will have both male and female buddy connections to connect to SCBA wearers.

Comply  Does Not Comply

Deviation from Specification: \_\_\_\_\_  
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**14. SCBA Air Cylinders:**

- 14.1 All air cylinders will have a minimum operating pressure of 4,500 psi.
- 14.2 All cylinders will be constructed of a deep-drawn, seamless aluminum liner that is fully wound over the entire surface, except the neck area, with high-strength carbon fiber filaments impregnated with epoxy resin.
- 14.3 All cylinders shall contain a cylinder valve that incorporates a pressure gauge to indicate cylinder levels (pressures) at all times. The pressure gauge face will be luminescent. The valve will have a handwheel for valve operation placed at a 90-degree angle from the cylinder axis.
- 14.4 All cylinders will be remote connection style with CGA threaded bottle to SCBA first stage regulator inlet connection.
- 14.5 All cylinders will have a flow control insert to minimize propulsion thrust while the cylinder is opened in the first half rotation.
- 14.6 All 45-minute 4,500 psi cylinders with valves and empty of air will have a maximum weight of 9 lbs 12 oz and maximum dimensions of 22 inches long and 6.3-inch diameter.
- 14.7 All 60-minute 4,500 psi cylinders with valves and empty of air will have a maximum weight of 11 lbs 14 oz and maximum dimensions of 25 inches long and 7-inch diameter.
- 14.8 All cylinders will have a protective boot for the regulator that also marries with the SCBA backplate for a solid and secure connection including proper positioning.
- 14.9 All cylinders will have the SFFR patch impregnated into each cylinder for easy identification and viewing.

Comply  Does Not Comply

Deviation from Specification: \_\_\_\_\_  
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**15. SCBA Facepiece:**

- 15.1 The facepiece will be designed and tested with the SCBA as a system.
- 15.2 The facepiece will not be permanently attached to the SCBA air connection or SCBA.

- 15.3 The facepiece will have a removable inhalation check valve to prevent exhaled from entering and contaminating the second stage regulator. This is to prevent spread of infectious diseases and illness among multiple wearers.
- 15.4 The facepiece will provide minimal breathing resistance when not attached to the SCBA regulator.
- 15.5 There will be no components attached to the exterior of the mask in order to prevent snags and not increase facepiece profile.
- 15.6 No electrical connections or attachments to the facepiece will be allowed in order to decrease overall cost of facepieces for replacement purposes.
- 15.7 The facepiece will provide a system of displaying the HUD indicators as specified above.
- 15.8 The facepiece regulator attachment will not bear any weight on the facepiece lens.
- 15.9 The facepiece shall be available in three sizes: small, medium, and large, and made of hycar rubber with a properly sized nose cup (small, medium, large) made of silicone rubber, and a four-point adjustable Kevlar head harness.
- 15.10 The vendor will work with SFFR to appropriately size/FIT all personnel to get an accurate facepiece size quantity. Once a complete facepiece size/quantity list is developed by SFFR and the vendor, final facepiece order by size/quantity will be completed.
- 15.11 The facepiece will have a single sized universal lens constructed of a non-shatter-type clear material that will fit in all three sized (small, medium, large) facepieces in order to reduce parts stock and ease of repair/replacement. The lens shall be field replaceable without special tools.
- 15.12 The facepiece lens shall be hard-coated exterior and anti-fog-coated interior.
- 15.13 The facepiece shall have a flame-/heat-resistant fabric neck strap to carry the facepiece when not donned. This will allow the facepiece to be in a ready position for quick donning.
- 15.14 The facepiece shall have a removable speaking diaphragm to enhance voice communication when not connected to the regulator.
- 15.15 The facepiece shall have an exhalation valve that is serviceable without special tools in the field.
- 15.16 The facepiece will be water immersible for cleaning and disinfecting.
- 15.17 The facepiece without regulator shall not exceed 1 lb 8 oz.
- 15.18 The facepiece will accommodate a spectacle kit. If the awarded vendor required a manufacturer's specific spectacle kit for personnel requiring corrective vision

lenses, the vendor will provide those spectacle kits at no cost to SFFR. This inclusion will include up to 15 spectacle kits.

#### **16. Confined Space Supplied Air Breathing System (SABA):**

- 16.1 The SCBA facepiece will attach to and be designed for the SCBA and SABA system and use the same second stage regulator as the SCBA.
- 16.2 The SABA system will attach to the wearer with a hip-style waist harness system made of fire-/heat-resistant webbing and secure quick pull-type adjustable straps.
- 16.3 The SABA system will contain an escape cylinder capable of five minutes of air for escape. The cylinder will be constructed of a fully wound carbon fiber materials. The escape bottle will have a regulator with luminescent analog back screen constantly indicating cylinder pressure/level. The cylinder will have a handwheel operation for the valve to open and close the valve for emergency escape air activations and deactivation.
- 16.4 The SABA system will have an air line supply inlet port with a male foster-style fitting.
- 16.5 The SABA system will have a second stage regulator (demand type) of the same construction/design and operation of the SCBA second stage regulator specified in No. 8 of these specifications.

#### **17. Air Purifying Respirator Kits (APR):**

- 17.1 The vendor shall provide an APR kit that attaches to the specified SCBA mask and is approved/tested for use with each other. Use of a separate facepiece for APR use will not be accepted due to FIT efficiency.
- 17.2 The APR kit will be capable of attaching up to two APR cartridges of a threaded design. The cartridges to be used will be designed for the system, and the manufacturer will offer different chemical respiratory hazard filtering canister types. The manufacturer will have several various filter options including different chemical specific filtering and micron ratings for dust filtration.
- 17.3 Each APR kit will contain supplies to outfit four personnel with APR capabilities utilizing the specified facepiece from No. 15 of these specifications.

#### **18. Rapid Intervention Crew (RIC) Kits:**

- 18.1 The RIC kit will be constructed of heavy-duty hi-vis orange cordura fabric with a heavy-duty protective skid plate mounted to the bottom for friction reduction.
- 18.2 The kit will have reflective striping sewn onto the cordura transversing the length of the top of the kit for high visibility.

- 18.3 The kit will have two storage pouches (one on each end) for accessing rescue tools, rope, and air lines. The pouches will be covered with a flap of same material and held closed with heavy-duty Velcro and will have a rope with a knob for easy use with a gloved hand to open. The grab handles will indicate, by shape, which end or flap is which by feel.
- 18.4 The kit storage area will be capable of securing and holding one 60-minute SCBA cylinder specified in No. 14 of these specifications, two air lines, a RIC rescue rope, and one SCBA facepiece as specified in No. 15 of these specifications.
- 18.5 The kit will have ten heavy-duty metallic rings attached to the base of the kit for attaching a seatbelt-style adjustable length shoulder/drag strap. The rings allow for different adjustments and attachment options for carrying or dragging.
- 18.6 The kit will have the following pneumatic air lines and features:
- One universal air connection (RIC air attachment) low-pressure hose equipped with a quick-connect fitting for the specified SCBA EEBS and another connection on the manifold for the universal air connection (RIC air connection).
  - One low-pressure hose with second stage regulator as specified in No. 8 of these specifications to attach to the RIC facepiece.
- 18.7 The kit will have a first stage pressure reducing valve/regulator to decrease cylinder output pressure to no more than 115 psi.
- 18.8 The kit will have a pressure gauge that is analog and luminescent to give constant cylinder pressure/level.
- 18.9 The kit will have an audible low-pressure alarm that activates when the cylinder pressure/level reaches 35 percent and lower.
- 18.10 The approximate overall dimensions of the kit are as follows:
- Length: 33 inches
  - Width: 11 inches
  - Height: 9 inches

**19. Performance Tests and Requirements:**

19.1 A single demo of the proposed unit(s) will be available for the City to perform an overall inspection and conduct operational testing on the unit prior to final contract award if requested.

Comply  Does Not Comply

Deviation from Specification: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**20. Warranty:**

20.1 The vendor will provide a 15-year manufacturer's warranty for the proposed SCBAs covering the SCBA pneumatics, electronics, and all accessories or optional equipment purchased. The warranty period will start from the day the units are delivered to the City. The warranty shall be supplied with each bidder's proposal and be printed on manufacturer letterhead.

20.2 The vendor will warranty the webbing, straps, and other consumables for a period of two years from date of product delivery.

Comply  Does Not Comply

Deviation from Specification: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Open Date Monday, December 29, 2014  
Description Self Contained Breathing Apparatus  
Department Fire  
Bid Number 15-0001

| Bid Tabulation                   |                |
|----------------------------------|----------------|
| Vendor                           | Total          |
| Allegiant Emergency Service, inc | \$895,558.94   |
| Heiman Inc / Dick Adkins         | \$1,112,175.00 |

BID REQUEST NO. 15-0001  
SPECIFICATIONS/BID FORM  
SELF-CONTAINED BREATHING APPARATUS

CONTRACT FORM

The undersigned shall, if awarded this contract, furnish to the City of Sioux Falls, South Dakota, the items at the prices bid in accordance with the conditions, specifications, and requirements as set out in the bid request and this response.

If awarded this request, the bidder's signature on this contract form is the bidder's contractual signature and when countersigned by the Mayor and delivered to the successful bidder shall become a binding contract to furnish the awarded item(s). The City's acceptance is conditioned upon the resolution of any subsequent protest to the bid award.

Signature of Bidder Mark A. Blennema  
Typed/Printed Name and Title Mark A. Blennema, President  
Company Name Allegiant Emergency Services, Inc  
Address 109 N Main  
PO Box 635  
Hartford SD 57033  
Telephone 605.528.3028 FAX 605.602.5129  
Federal Tax ID No. 27-1793811 Email Mark@allegiantes.com  
South Dakota Sales Tax Permit No. 1022-4301-57

Accepted by the City of Sioux Falls,

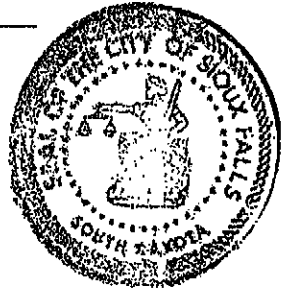
Mike T. Huebner  
Mike T. Huebner, Mayor

ATTEST:

Kamera Ingeborn  
City Clerk, aocst

Information Only

- Our company accepts credit cards
- Our company does not accept credit cards



**Award by Vendor**

Run Date: 10/20/2015 5:35 PM

Purchasing Entity: City of Sioux Falls  
Bid ID: 179  
Description: 15-0001 Self-Contained Breathing Apparatus  
Category: Fire

Awarded: 01/08/2015  
Bids Due By: 12/29/2014 2:00 PM  
Bids Sealed Until: 12/29/2014 2:00 PM

**Vendor Response Terms**

| Vendor Name                      | Response Terms  | Response Payment Terms |
|----------------------------------|---|------------------------|
| Allegiant Emergency Service, Inc | Delivery of 20 SCBA, 20 masks and 40 Cylinders by February 2, 2015. Remaining SCBA order delivery approximately 90-120 days after that. | Net 30                 |

Heiman Inc / Dick Adkins

Net 30 days after Invoicing.



| Vendor                            | Line Number | Lot Code | Item Description  | Purchase Unit | Product Number       | Response Quantity | Bid Price | Award Quantity | Total Price |
|-----------------------------------|-------------|----------|---|---------------|----------------------|-------------------|-----------|----------------|-------------|
| Alleghiant Emergency Service, Inc | 1           |          | Item #: 1<br>Self-Contained Breathing Apparatus, per specifications<br>Item Manufacturer & Part Number: MSA G1<br>Item Notes: Bid price for the SCBAs shall not include price for the Emergency Escape Breathing System (EEBS or Buddy Breather). That items shall be priced as a separate line item. See Addendum No. 1 for additional details.<br>Response Item Payment Terms: Net 30 | 1 - Count     | GIFS422MF2C0L<br>AA  | 140               | 3554.7100 | 140            | 497,659.40  |
| Alleghiant Emergency Service, Inc | 2           |          | Item #: 2<br>Facepiece for SCBA, per specifications<br>Item Manufacturer & Part Number: MSA G1 - FM1M4C1<br>Response Item Payment Terms: Net 30<br>Response Item Notes: Per Addendum 1 EEBS is not included in base bid price. First 40 Cylinders will not have SFFR Patch. Warranty 2 year consumable comply. Items will be exchanged for new item for item. Batteries are excluded.   | 1 - Count     | MSA G1 Face<br>Piece | 270               | 220.5900  | 270            | 59,559.30   |
| Alleghiant Emergency Service, Inc | 3           |          | Item #: 3<br>4,500 psi 45-minute Bottle, per specifications<br>Item Manufacturer & Part Number: MSA<br>Response Item Payment Terms: Net 30<br>Response Item Notes: Up to 15 Spectacle kits are included. Additional are \$74.00 Each.   | 1 - Count     | 10156424-SP          | 245               | 806.0600  | 245            | 197,484.70  |
| Alleghiant Emergency Service, Inc | 4           |          | Item #: 4<br>4,500 psi 60-minute Bottle, per specifications<br>Item Manufacturer & Part Number: MSA<br>Response Item Payment Terms: Net 30<br>Response Item Notes: None   | 1 - Count     | 10156424-SP          | 50                | 978.2900  | 50             | 48,914.50   |
| Alleghiant Emergency Service, Inc | 5           |          | Item #: 5<br>Rapid Intervention Crew Kit, per specifications<br>Item Manufacturer & Part Number: Scott<br>Response Item Payment Terms: Net 30<br>Response Item Notes: None  | 1 - Count     | Scott RIT III        | 6                 | 3350.0000 | 6              | 20,100.00   |
| Alleghiant Emergency Service, Inc | 6           |          | Item #: 6<br>Confined Space Supplied Air Breathing Apparatus, per specifications<br>Item Manufacturer & Part Number: MSA<br>Response Item Payment Terms: Net 30<br>Response Item Notes: None  | 1 - Count     | MS SABA              | 10                | 1646.0000 | 10             | 16,460.00   |

| Vendor   | Line Number | Lot Code | Item Description  | Purchase Unit | Product Number     | Response Quantity | Bid Price | Award Quantity | Total Price       |
|--|-------------|----------|---|---------------|--------------------|-------------------|-----------|----------------|-------------------|
| Allegiant Emergency Service, Inc   | 7           |          | Item #: 7<br>Air Purifying Respirator Adapter Kit,<br>per specifications<br>Item Manufacturer & Part Number: MSA<br>Response Item Payment Terms: Net 30                         | 1 - Count     | 10032925 SP<br>APR | 6                 | 372,8400  | 6              | 2,237.04          |
| Response Item Notes: None  |             |          |   |               |                    |                   |           |                |                   |
| Allegiant Emergency Service, Inc   | 8           |          | Item #: 8<br>Emergency Escape Breathing<br>System (EEBS or Buddy Breather)<br>per specifications<br>Item Manufacturer & Part Number: MSA<br>Response Item Payment Terms: Net 30 | 1 - Count     | G1 EBBS            | 140               | 379,6000  | 140            | 53,144.00         |
| Response Item Notes: Price includes install by Allegiant and would be installed after delivery upon approvals. |             |          |   |               |                    |                   |           |                |                   |
| <b>Allegiant Emergency Service, Inc Total Award:</b>   |             |          |   |               |                    |                   |           |                | <b>895,558.94</b> |



Allegiant Emergency Services, Inc  
 109 N. Main, PO Box 635  
 Hartford, SD 57033  
 www.allegiantes.com  
 605-528-3078

# Estimate

| Date      | Estimate # |
|-----------|------------|
| 9/11/2015 | 15601      |

| Name / Address  |
|---|
| Rapid City Emergency Services<br>Accounts Payable<br>300 6th St<br>Rapid City, SD 57701 |

56 SCBA'S 199,063.76  
 135 FACEPIECES 29,779.65  
 112 BOTTLES 90,278.72  
 8 RIT PAKS 26,800.00  
 -----  
 \$ 345,922.13

| Terms  | Rep |
|--------|-----|
| Net 15 | Rob |

| Qty            | Item               | Description   | Price Each      | Total                                 |
|----------------|--------------------|---|-----------------|---------------------------------------|
| 1              | G1 4500 SPR        | MSA G1 Custom ATO:<br>MSA G1 SCBA<br>G1FS422MA2C0LAA<br>System Pressure4 - 4500 psig<br>Cylinder Connection2 - CGA Threaded Remote<br>Connection<br>Harness2 - Standard with Chest Strap<br>Cradle TypeM - Metal Band<br>Lumbar TypeA - Adjustable Swiveling Lumbar Pad<br>Regulator Type2 - Solid Cover Left Shoulder<br>Regulator Hose TypeC - Continuous<br>Emergency Breathing Support0 - None<br>Speaker ModuleL - Left Chest<br>PASSA - PASS Right Shoulder<br>Battery TypeA - Alkaline | 3,554.71        | 3,554.71<br><u>X 56</u><br>199,063.76 |
| 1              | G1 Face STD-SPR    | MSA G1 Face Piece, Medium, Hycar, Medium Nose<br>Cup, 4 Pt Adjustable Head Harness, Neck Strap and push<br>to connect.  | 220.59          | 220.59<br><u>X 135</u><br>29,779.65   |
| 2              | G1 4500/45 LP-S... | 4500 PSI 45 Min Carbon Fiber Cylinder with Valve  | 806.06          | 1,612.12                              |
| 1              | SCO 200954-02      | Scott RIT PAK 3 Less Scott Mask.  | 3,350.00        | 3,350.00<br><u>X 8</u><br>26,800      |
| Thank you, Rob |                    |   | <b>Subtotal</b> | \$8,737.42                            |

806.06  
 X 112  
 -----  
 90,278.72

Freight charges may be additional unless otherwise specified.

|              |            |
|--------------|------------|
| <b>Total</b> | \$8,737.42 |
|--------------|------------|