



**Request for Bids
Self-Contained Breathing Apparatus (SCBA)
City of Concord
Fire Department
Ray Allen, Fire Chief**

Bid Responses Due By: September 19, 2014 at 11:00 a.m.

**Submittals shall be delivered in a sealed package container or envelope
clearly marked on the outermost portion of the package:
Concord Fire Department SCBA Bid**

Bids will be received at:

Alfred M. Brown Operations Center
Conference Room C
850 Warren C. Coleman Boulevard
Concord, North Carolina 28025

Direct Questions to:

Gerald Harris, Logistics Officer
E-Mail: firelogistics@concordnc.gov
Phone: 704-920-5531

ANTICIPATED SCHEDULE OF EVENTS

EVENT	DATE
Advertise Period of RFB	September 4, 2014 – September 18, 2014
Questions and Clarification Requests Due	September 18, 2014 at 3:00 p.m.
Bid Due Date and Opening	September 19, 2014 at 11:00 a.m.
Anticipated Award Date	October 2014

**CITY OF CONCORD FIRE DEPARTMENT
REQUEST FOR BIDS ON
SELF-CONTAINED BREATHING APPARATUS**

1. INTRODUCTION

- 1.1. The City of Concord Fire Department is seeking bids for purchase of self-contained breathing apparatus (SCBA) and related components. The SCBA and related components shall meet the minimum specifications listed below. Options are listed immediately following the minimum specifications. Proposals on the options are at the discretion of the vendor. All bids must conform to these specifications and be presented on the forms provided for that purpose.

2. BIDS

- 2.1. Bids must be submitted on the forms included in this document, and must be properly signed in the spaces indicated. Two (2) complete sets of your bid must be submitted in a sealed envelope plainly marked with the bid number through the City of Concord Purchasing Department. Bids submitted otherwise will not be acceptable.
- 2.2. Bidders unable to submit a bid in response to this Request for Bids (RFB) should so advise in writing to preclude exclusion from future RFBs.
- 2.3. The City of Concord reserve the right to reject any or all bids, waive technicalities, and to be the sole judge of suitability of the equipment or services for its intended use and further specifically reserve the right to make the award in the best interests of the City. All equipment or services listed is intended for a particular use by the City in which it is to be utilized and must meet the requirements of that particular division(s). Other factors to be considered in awarding the bid will be price, quality, and time required to make delivery. Unless otherwise specified by the bidder, the City reserves the right to accept any item in the bid and to award items to one single provider.
- 2.4. Failure to respond to any requirements outlined in this RFB, or failure to enclose copies of the required documents, may disqualify the bid.
- 2.5. Since time is of the essence, the date of delivery as shown in the Bid may be taken into consideration in the award or in the cancellation of the award for breach of contract.
- 2.6. A contract will be awarded after an evaluation of all bids have been made, and in the interest of suitability to the City's needs and/or economy, equipment, furnishings or service other than the cheapest in price may be selected.

3. EXCEPTIONS TO SPECIFICATIONS

- 3.1. These specifications are based upon design and performance criteria which have been researched and analyzed by the department. Therefore, major exceptions to these specifications will not be accepted.
- 3.2. To the right side of each section for a particular specification, the bidder shall state "YES", "NO" or "EXCEPTION" indicating the exact compliance with the specification.
- 3.3. All deviations and exceptions, no matter how slight, shall be clearly explained in writing with the bid proposal. All exceptions must list the section and fully describe the exception or alternative.
- 3.4. The City of Concord Fire Department may choose to reject bids based on exceptions. Any exceptions that make the SCBA non-compliant with the National Fire Protection

Association's 2013 Edition of NFPA-1981 Standard on Open-Circuit Self-Contained Breathing Apparatus will result in the bid being rejected.

4. WARRANTY INFORMATION

- 4.1. Vendor shall state specifically in the bid the manufacturer's warranty regarding parts and labor, and the duration of the warranty in years. If separate parts of the SCBA/cylinder/facepiece have different warranties, this shall be specified in the bid. The vendor shall state specifically any and all regularly scheduled maintenance and requirements outlined by the manufacturer to maintain any and all warranties.
- 4.2. Additionally, the vendor shall also provide specific information regarding where said maintenance can and/or should be performed (i.e., within Concord Fire Department, manufacturer's service center, etc.).

5. COST OF OWNERSHIP

- 5.1. The vendor and/or manufacturer's representative shall, to the best of their ability, provide documentation and/or information regarding their SCBA's projected "cost of ownership" over a five, ten and fifteen-year period.

6. CONTACT

- 6.1. Questions regarding the specifications should be directed to Logistics Officer Gerald Harris, City of Concord Fire Department, (704) 920-5531 or firelogistics@concordnc.gov.

7. MINIMUM SPECIFICATIONS OF THE SELF-CONTAINED BREATHING APPARATUS

- 7.1. It is the intent of these minimum specifications to describe certain equipment in sufficient detail to obtain competitive bids from qualified vendors for the furnishing and delivery of said equipment to be used by the City of Concord Fire Department. All parts not specifically mentioned which are necessary to provide the described equipment shall be included in the proposal and shall conform in strength and quality or material and workmanship to what is usually provided for the trade in general. Any omissions of components in these specifications are inadvertent and should be included in the proposed SCBA.

	Meets Specifications		
	Yes	No	Exception
7.2. SCBA shall be approved by the National Institute for Occupational Safety and Health (NIOSH), under 42 CFR, Part 84 for chemical, biological, radiological, and nuclear protection (CBRN) with 45 or 60 minute-rated service life and compliant with all requirements of the National Fire Protection Association's 2013 Edition of NFPA-1981 Standard on Open-Circuit Self-Contained Breathing Apparatus.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3. Units equipped with integrated PASS device must meet requirements of NFPA 1982, 2013 edition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.4. Units equipped with accountability system must meet minimum requirements for FCC part 15 and part 90.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.5. Facepiece	Meets Specifications		
	Yes	No	Exception
7.5.1. Facepiece shall have removable inhalation check valve to prevent exhaled air from entering and contaminating the	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	second stage regulator			
7.5.2.	Facepiece shall have an open port to provide miniscule breathing resistance when regulator is not attached.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.3.	Facepiece shall not contain electronic components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.4.	Facepiece shall provide means to display to user with visual indicators for Heads-Up Display (HUD).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.5.	Facepiece shall have icon for HUD system status indicators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.6.	Facepiece shall have regulator attachment that does not bear any weight on lens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.7.	Facepiece shall have effective field of view of 86% and overlapping field of view of 122% without attached component	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.8.	Facepiece shall be available in three sizes in Hycar Rubber (small, medium, large)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.9.	Facepiece shall have a nose cup comprised of silicone rubber and available in three sizes (small, medium, large)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.10.	Facepiece shall have three head harness options constructed of flame/heat resistant assembly: 7.5.10.1. Kevlar 4-pt. adjustable Head Harness 7.5.10.2. Kevlar 5-pt. adjustable Head Harness 7.5.10.3. Rubber 5-pt. adjustable Head Harness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.11.	Facepiece shall have universal lens that can be used with all three facepiece sizes, shall be comprised of non-shatter type material and shall be field-replaceable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.12.	Lens shall be hard-coated on outside and anti-fog coated on inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.13.	Facepiece shall have optional flame/heat-resistant fabric neck strap to carry facepiece in ready position for quick donning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.14.	Facepiece shall have removable speaking diaphragm with aluminum-coated membrane, suitably protected and located centrally on facepiece for optimal voice projection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.15.	Facepiece shall have exhalation valve that is to be serviceable without special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.16.	Facepiece shall be capable of water submersion for cleaning and disinfection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.17.	Facepiece provides optional RFID chip for asset and maintenance tracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.6. Mask-Mounted Regulator	Meets Specifications		
	Yes	No	Exception
7.6.1. The second stage regulator shall be a Push-to-Connect style	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.6.2.	When donning regulator, regulator disengagement shall simultaneously stop air flow and release regulator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.3.	Regulator shall house electronic module that functions as microphone and HUD system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.4.	Regulator shall be equipped with variable flow bypass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.5.	Regulator shall not have exposed wiring in order to prevent snags and increase product durability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.6.	Regulator shall have a purge cover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.7.	Regulator shall have fewer than 35 parts that are easily replaceable without special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.8.	Regulator shall have a Quick-connect air supply hose that terminates on the shoulder in front of user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.9.	Regulator must be equipped with positive protection Tetraplex Shield membrane that covers diaphragm, preventing permeation of CBRN agents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.10.	Regulator shall have optional RFID chip for asset and maintenance tracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Meets Specifications		
7.7. Heads-Up Display (HUD)		Yes	No	Exception
7.7.1.	Heads-Up Display (HUD) System shall be integrated within regulator, eliminating snag hazards and increase product durability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.2.	HUD shall be powered from central power system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.3.	HUD System shall eliminate cross-talk among firefighters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.4.	HUD System shall be immune to radio frequency interference (RFI) and must function properly in close proximity to fire service hand-held radios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.5.	HUD System shall separate pressure indicators from status indicators: 7.7.5.1. Left: status indicators 7.7.5.2. Right: pressure indicators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.6.	HUD system shall provide user with remaining cylinder air volume, available in four increments through series of four colored LEDs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	7.7.6.1. Four green lights - 76 to 100% cylinder volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	7.7.6.2. Three green lights - 51 to 75% cylinder volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	7.7.6.3. Two flashing amber lights - 34 to 50% cylinder volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	7.7.6.4. One flashing red light - 0 to 33% cylinder volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.7.	HUD status indicators shall be icon-based and display battery life warning, PASS alarms, EVACUATE indicator,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

and secondary alarm indicator			
7.7.8. HUD shall incorporate photoelectric sensor that senses ambient light conditions, automatically adjusting display to one of multiple pre-programmed light intensities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.9. Buddy lights shall be visible from outside of firefighter's facepiece	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10. HUD system shall allow user to select from four modes of operation:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10.1. Continuous pressure mode that shall always have pressure LEDs on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10.2. Intermittent pressure mode that shall turn on first three increments when reached for 20 seconds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10.3. Oscillating pressure mode that shall brighten and dim LEDs every 20 seconds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10.4. Mixed pressure mode that shall turn on first two increments when reached for 20 seconds and last two increments are in continuous mode	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.11. HUD shall be field-removable and replaceable without use of special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.8. Universal Air Connection (UAC)			
7.8.1. System shall be capable of:			
7.8.1.1. Refill within immediately dangerous to life or health (IDLH) atmospheres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.1.2. Transfilling between two SCBA wearers (connection allows for donation and receipt of air), providing emergency breathing system (EBS) while maintaining NIOSH approvals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.1.3. Quickly refilling (approximately one-minute duration) SCBA cylinder from mobile compressor, cascade system or RIT pack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.1.4. Extending wearer's air supply over longer duration when remote cascade system or other compressed gas source is located within remote area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.2. Primary UAC shall be illuminated when supply pressure reaches Low Pressure Warning Alarm or can be configured to optional medium pressure warning alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.3. SCBA shall have secondary options for UAC to be mounted on user's waist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.4. SCBA shall have pouch equipped with a 3 foot quick-fill hose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.9. Pressure Reducer (First-Stage Regulator) with Primary Low Pressure Warning Device			
7.9.1. Pressure reducer shall incorporate downstream valve to ensure fail-safe design when in open position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.2. Pressure reducer shall incorporate bell alarm mechanism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.2.1. Bell alarm mechanism shall be an air-actuated, continuously ringing audible warning alarm, automatically operating when supply cylinder air pressure reaches approximately 33% of rated service life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.2.2. Bell alarm mechanism shall cover multiple levels of frequencies to cover all hearing levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.2.3. Bell alarm mechanism shall be user-accessible while wearing SCBA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.3. Pressure reducer reduces cylinder pressure to outlet pressure not to exceed 115 psi; outlet pressure must be adjustable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.4. Pressure reducer shall have flow capacity of 700 liters per minute at full pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.5. Pressure reducer shall have quick-connect cylinder connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.5.1. Quick-connect connection shall not be removable from cylinder while under pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.6. Pressure reducer shall have a remote connection for cylinder connection location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.7. Pressure reducer body shall be constructed of high-strength aluminum alloy and anodized with Teflon hard coat to minimize corrosion and wear of internal and external components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.8. Pressure reducer shall be sealed system that does not allow moisture to enter valve components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.9. Pressure reducer shall have no more than 42 individual regulator replacement parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.10. Pressure reducer shall not require special tools for disassembly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.11. Pressure reducer shall have two accessory ports, one medium pressure and one high pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.10. Cylinders			
7.10.1. Cylinders with 4500 psig operating pressure must be available in 45- and 60-minute durations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.10.2. Cylinder shall be constructed of deep-drawn, seamless aluminum liner that is fully wound over entire surface (except for thick neck area) with high-strength carbon fiber filaments impregnated with epoxy resin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.3. Cylinder shall contain cylinder valve that shall incorporate pressure gauge to indicate cylinder pressure at all times. Pressure gauge face shall be luminescent. Hand wheel shall be placed at 90° angle from cylinder axis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.4. Cylinder valve shall be available with remote connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.5. Cylinder valve shall incorporate flow control insert to limit air flow over hand wheel's first half-rotation, minimizing propulsion thrust in event that cylinder is mishandled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.6. Cylinder valve shall incorporate CGA thread that can be converted to quick connect cylinder without special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.7. Cylinder shall have bracket and boot that can be user-installed and provide positioning and added security of cylinder to back plate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.8. Delivered cylinders more than 90 days past their manufacture date will not be accepted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.11. PASS Device			
7.11.1. PASS device shall contain the power, control and battery modules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.2. Power module shall provide power to all electronic SCBA components from the battery module and act as central power system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.3. Power module shall act as central command center, distributing all information and data among electronic components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.4. Battery module shall be powered by six C-cell batteries or one lithium-ion rechargeable battery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.5. Expected battery service life batteries shall be 3 to 5 months on average with telemetry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.6. PASS device shall be designed for battery level check and removal of batteries while SCBA remains in jump seat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.7. Power module shall be capable of illuminating UAC fitting when supply cylinder reaches 33% of rated service time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.8. Control module shall have analog and digital display for added redundancy. Analog gauge must be positioned above digital display as viewed by user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.11.9.	Control module shall be equipped with full color graphical display. Display shall be reprogrammable and capable of future integrations. The display's background color shall coordinate with HUD pressure status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.10.	Control module shall automatically provide information to user when placed in upright position. Device can be manually activated by pressuring reset button	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.11.	PASS device shall use single line to connect power and control module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.12.	Control module shall have two reset buttons that perform same function no matter which button is pressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.13.	PASS device shall be capable of being reprogrammed to fire department standard operating procedures (SOP). Using PC software program, configuration tag can be created and tagged on each device needed. Reprogramming options are as follows: 7.11.13.1. Medium pressure alarm 7.11.13.2. Pressure drop alarm 7.11.13.3. Primary temperature alarm 7.11.13.4. Secondary temperature alarm 7.11.13.5. Audible low pressure alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.14.	PASS device shall be equipped with buddy lights on firefighter's front and back and viewable from 360° view; two buddy lights on front of user and four buddy lights in back of user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.15.	PASS device shall have colored buddy lights: green (pressure above 50% and no alarms), yellow (pressure between 34 and 50%) or red (below 34% or alarms are active)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.16.	Power module shall be equipped with dual sound emitters; sound emitters shall perform at minimum 100 dBA in room temperature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.17.	PASS device shall be capable of storing up to 25 hours of use information in event log form that are generated each time SCBA is pressurized. Event logs must indicate on/off cycles, alarms, alarm reset, and tagging events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.18.	PASS device shall be capable of storing periodic logs. Periodic logs must indicate cylinder pressure for each SCBA pressurization stored at 15-second intervals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.19.	PASS device's event and periodic logs shall provide ability to download to personal computer for maintenance records or for use in incident investigations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.20.	PASS device shall be immune to radio frequency interference (RFI) and must function properly in close proximity of fire service hand-held radios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.21.	PASS device shall have optional time-remaining display. Time remaining function must update calculations every 30 seconds based upon user's previous three minutes of air consumption. Initial calculation will appear after three	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

minutes. Calculations can be made to zero pressure, low pressure alarm or medium pressure alarm			
7.11.22. PASS device shall employ gasket perimeter seal to provide highest protection level against water ingress, while providing ability to upgrade or repair electronics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.23. PASS device shall be capable of electronically storing user's name into memory via ID tag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.24. PASS device shall be removable with no more than two screws	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.25. Control module shall have service mode that provides ability to see number of hours used, connect to PC and firmware versions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.26. Control module shall incorporate rubber boot for added protection and is to be replaceable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.27. Power and Control Modules shall have optional RFID chip for asset and maintenance tracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.28. The PASS device shall be capable of transmitting the following information to a remote base station receiving unit for accountability purposes 7.11.28.1. Firefighter name, truck or team assignment, cylinder pressure, service time remaining, PASS alarms (motion or manual) thermal alarms, battery status, radio connectivity and evacuation acknowledgement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.12. Speaker Module			
7.12.1. Speaker module shall provide amplified speech that removes inhalation breath noise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.2. Speaker module shall provide at minimum, 70 dBa output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.3. Speaker module shall turn on and off with PASS device	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.4. Speaker module shall be powered by central power system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.5. Speaker module shall be capable of passing NFPA heat and immersion leakage test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.6. Speaker module shall be positioned on chest and attached to shoulder straps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.7. Speaker module shall be capable of being mounted on either shoulder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.8. Speaker module shall easily be attached and removed without special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.9. Speaker module shall have light to indicate that device is powered on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.10. Speaker module shall have on/off button to allow user to manually power off as needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.13. Carrier and Harness	Meets Specifications		
	Yes	No	Exception
7.13.1. Shoulder harness shall have separate left and right pads for easier and less costly replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.2. Shoulder harness shall have retro-reflective markings for better visibility within low light conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.3. Shoulder harness shall have localized frictions pads on shoulders to prevent slippage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.4. Shoulder harness shall have an adjustable chest strap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.5. Harness design shall have Kevlar webbing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.6. Shoulder harness shall have accessory attachment point available for facepiece or pouch and can be moved from left to right shoulder strap or vice versa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.7. Shoulder harness shall differentiate pad inside from pad outside by color; pad inside is grey and outside is black	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.8. Waist pad shall be adjustable swiveling – standard pad attached to metal bracket that has three positions and automatically centers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.9. Adjustable swiveling waist pad shall be one-handed operation and can be performed while on user's back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.10. Back plate shall have two side handles and one top handle that are accessible with gloved hand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.11. Back plate side handles shall be capable of 500 lbs. of force	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.12. Back plate top handle shall be capable of 1000 lbs. of force	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.13. Back plate cylinder band shall be metal and easily adjust to accommodate different cylinder sizes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.14. Waist pad shall be of rigid construction to allow for easy donning and support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.15. Waist straps shall be double-pull forward design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.16. Harness design shall have regulator keeper for storage that can be attached to waist strap or chest strap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.17. Regulator keeper shall allow regulator to be connected at any angle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. OPTIONS

8.1. The City of Concord Fire Department has identified the following options that it will consider in addition to the minimum specifications. Additional options will be considered given they fall within the available budget for the project.

8.2. OPTION A	Meets Specifications		
	Yes	No	Exception
8.2.1. Accountability system to include base station, tags, tag reader/writer and software.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.3. OPTION B	Meets Specifications		
	Yes	No	Exception
8.3.1. Radio interface to Motorola APX6000XE portable radio to allow ease in communication.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.4. OPTION C	Meets Specifications		
	Yes	No	Exception
8.4.1. Factory labeling of SCBA backpack/harness to identify ownership and to include Concord Fire Department inventory numbering system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.4.2. Factory labeling of cylinders with a Concord Fire Department logo as an integral part of the cylinder wrap, add on or glued on stickers are not acceptable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.5. OPTION D	Meets Specifications		
	Yes	No	Exception
8.5.1. Trade-in allowance (credit) for existing SCBA inventory. (See LIST OF PRESENT SCBA SUPPLIES FOR TRADE-IN ALLOWANCE). The City of Concord Fire Department solely reserves the right to exercise or not exercise this option. Any trade in allowance (credit) will be applied towards the purchase of SCBAs, related components, and/or testing/training costs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.6. OPTION E	Meets Specifications		
	Yes	No	Exception
8.6.1. Emergency Air Supply System (RIT Pack). The air source shall consist of the following components:			
8.6.1.1. A carrying bag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.2. External pressure gauge (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.3. An audible low-pressure alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.6.1.4. A Universal Air Connection (UAC) high- pressure emergency airline that will function with any manufacturers NFPA 1981, 2002 compliant or newer self-contained breathing apparatus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.5. A low-pressure airline hose assembly with a low-pressure manifold that has a male and female quick disconnect and additional ports to allow the use of other SCBA manufacturer's low-pressure fittings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.6. A RIT Style facepiece (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.7. A second stage pressure regulator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.7. OPTION F	Meets Specifications		
	Yes	No	Exception
8.7.1. Upgrade of Concord Fire Departments existing RIT packs to be compatible with the new SCBA.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.8. OPTION G	Meets Specifications		
	Yes	No	Exception
8.8.1. Supplied Air Respirator (SAR) harness assemblies and cylinders. These shall consist of a Kevlar adjustable waist strap and padded adjustable shoulder strap. The unit shall be equipped with a 10-minute escape cylinder.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.9. OPTION H	Meets Specifications		
	Yes	No	Exception
8.9.1. Upgrade of Concord Fire Departments existing SAR units to be compatible with the new SCBA facepiece.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.10. OPTION I	Meets Specifications		
	Yes	No	Exception
8.10.1. Air Purifying Respirator adaptor with twin cartridges to be used with the SCBA facepiece	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.11. OPTION J	Meets Specifications		
	Yes	No	Exception
8.11.1. 100 foot sections of supplied breathing air lines with fittings that are compatible SAR units.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.12. OPTION K	Meets Specifications		
	Yes	No	Exception
8.12.1. TSI 8030 PortaCount Pro Respirator Fit Tester	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. TRAINING AND FIT TESTING	Meets Specifications		
	Yes	No	Exception
9.1. The successful bidder shall provide, at no cost to the department, a technician level maintenance training class to six (6) members of the department at the manufacturer's location. A description of how this training will be performed shall be included in the proposal. Required tools for performing repairs, maintenance, and flow testing, and PC interface for PASS alarm (with software) shall be provided at this training.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2. The successful bidder will submit a plan for training all department personnel how to use the SCBA. The training program shall be in a Power Point or similar format.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.3. The successful bidder shall provide initial fit testing for all members of the fire department. The fit testing shall comply with quantitative fit testing protocol per OSHA 1910.134 Appendix A Part I.c.3 (CNC (PortaCount) protocol). Fit testing shall include proper fit for each user with all sizes of face piece and nose cup being utilized to insure an adequate fit test is achieved. A computer generated report shall be provided to the department. The report shall include the information specified in OSHA 1910.134(m) records.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. SPARE PARTS	Meets Specifications		
	Yes	No	Exception
10.1.1. The manufacturer shall provide to the department enough parts and maintenance supplies to repair the SCBA's so they can be placed back in service while waiting on warranty parts to be delivered. This should include, as a minimum, the following components: 10.1.1.1. 4 – Complete second stage regulators 10.1.1.2. 4 – Complete control modules 10.1.1.3. 4 – Complete first stage pressure reducer and low air alarms 10.1.1.4. 4 – Complete sets of straps (shoulder, chest and waist belts) and lumbar pads 10.1.1.5. 2 – PASS modules 10.1.1.6. 2 – Speaker modules 10.1.1.7. O-rings and seals for second stage regulator 10.1.1.8. 4 – UAC fittings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.2. The manufacturer shall provide a complete parts list with prices for the SCBA, Facepiece and Cylinder. This shall be included with the bid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. PRICING	Meets Specifications		
	Yes	No	Exception
11.1. The vendor shall provide a guaranteed purchase price on the items and quantities for a period of twelve (12) months.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.2. Pricing shall also be extended to all Cabarrus County, North Carolina public safety agencies to include police, fire and emergency medical providers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REQUIRED QUANTITIES AND PRICING

Item #	Quantity	Description	Price Each	Total Price
1	150	2013 Edition of NFPA-1981 4500 psig Compliant SCBA		
2	300	4500 psig, 45 minute rated, low profile, Carbon-Wrapped cylinder		
3	24	4500 psig, 60 minute rated, Carbon-Wrapped cylinder		
4	200	Facepiece		
5	200	Facepiece Bags, with drawstring closure, ID window and clip for securing bag.		
6	20	Carrying cases for SCBA		
7	1	Updated software for Posi-Chek 3 USB		
8	2	Fit test adaptors for use with a TSI PortaCount		
9	25	Spectacle kits for use with facepiece		
10	1	Shipping Cost		
Total Price of Required Items				

Delivery time for required quantities to Concord Fire Department once the order is placed will be _____ days.

12. OPTION PRICING

Option	Quantity	Description	Price Each	Total Price
A	6	Accountability base stations and software		
A	200	Accountability RFID tags		
A	1	Accountability RFID tag reader/writer		
B	18	Radio interface for Motorola APX6000XE		
C	150	Factory labeling of SCBA backpack/harness		
C	324	Factory labeling of Cylinders with fire department logo		
E	10	Emergency Air Supply System (RIT Pack)		
G	6	Supplied Airline Respirators (SAR) with 10 minute escape cylinder		
I	150	Air Purifying Respirator (APR) adaptors		
I	300	P100, plus OV, CL, SD, CD, HC, HS, AM, MA, FM and MV Filter cartridges for use with APR adaptors		
J	12	100 foot sections of supplied breathing air lines with fittings that are compatible SAR units.		
K	1	TSI 8030 PortaCount Pro Respirator Fit Tester		
Total Price of Options				

13. UPGRADE OPTION PRICING

Option	Quantity	Description	Price Each	Total Price
A	3	Upgrade of current accountability base stations and software to be compatible with the new SCBA		
F	7	Upgrade of existing RIT packs to be compatible with the new SCBA		
H	6	Upgrade of existing SAR units to be compatible with the new facepiece		
Total Price of Upgrade Options				

14. TRADE IN QUANTITIES – OPTION D

Item #	Quantity	Description	Price Each	Total Price
1	123	MSA Firehawk PTC SCBA		
2	10	MSA M7 PTC SCBA		
3	Approx. 265	MSA 4500 psig 45 minute cylinders		
4	Approx. 26	MSA 4500 psig 60 minute cylinders		
5	Approx. 190	MSA Ultra Elite Facepieces		
Total Credit for Trade In Items				

**CITY OF CONCORD FIRE DEPARTMENT
REQUEST FOR BIDS ON
SELF-CONTAINED BREATHING APPARATUS**

I, _____, as an authorized signer for my company hereby certify that the figures contained in this Bid Proposal are accurate and correct. I also have read and understand the specifications for the City of Concord, North Carolina, Self-Contained Breathing Apparatus and submit this Bid Proposal for consideration.

Signed _____

Print Name _____

Title _____

Company _____

Mailing Address _____

Phone _____

Date _____



**Request for Bids
Self-Contained Breathing Apparatus (SCBA)
City of Concord
Fire Department
Ray Allen, Fire Chief**

Bid Responses Due By: September 19, 2014 at 11:00 a.m.

**Submittals shall be delivered in a sealed package container or envelope
clearly marked on the outermost portion of the package:
Concord Fire Department SCBA Bid**

Bids will be received at:

Alfred M. Brown Operations Center
Conference Room C
850 Warren C. Coleman Boulevard
Concord, North Carolina 28025

Direct Questions to:-

Gerald Harris, Logistics Officer
E-Mail: firelogistics@concordnc.gov
Phone: 704-920-5531

ANTICIPATED SCHEDULE OF EVENTS

EVENT	DATE
Advertise Period of RFB	September 4, 2014 – September 18, 2014
Questions and Clarification Requests Due	September 18, 2014 at 3:00 p.m.
Bid Due Date and Opening	September 19, 2014 at 11:00 a.m.
Anticipated Award Date	October 2014

**CITY OF CONCORD FIRE DEPARTMENT
REQUEST FOR BIDS ON
SELF-CONTAINED BREATHING APPARATUS**

1. INTRODUCTION

- 1.1. The City of Concord Fire Department is seeking bids for purchase of self-contained breathing apparatus (SCBA) and related components. The SCBA and related components shall meet the minimum specifications listed below. Options are listed immediately following the minimum specifications. Proposals on the options are at the discretion of the vendor. All bids must conform to these specifications and be presented on the forms provided for that purpose.

2. BIDS

- 2.1. Bids must be submitted on the forms included in this document, and must be properly signed in the spaces indicated. Two (2) complete sets of your bid must be submitted in a sealed envelope plainly marked with the bid number through the City of Concord Purchasing Department. Bids submitted otherwise will not be acceptable.
- 2.2. Bidders unable to submit a bid in response to this Request for Bids (RFB) should so advise in writing to preclude exclusion from future RFBs.
- 2.3. The City of Concord reserve the right to reject any or all bids, waive technicalities, and to be the sole judge of suitability of the equipment or services for its intended use and further specifically reserve the right to make the award in the best interests of the City. All equipment or services listed is intended for a particular use by the City in which it is to be utilized and must meet the requirements of that particular division(s). Other factors to be considered in awarding the bid will be price, quality, and time required to make delivery. Unless otherwise specified by the bidder, the City reserves the right to accept any item in the bid and to award items to one single provider.
- 2.4. Failure to respond to any requirements outlined in this RFB, or failure to enclose copies of the required documents, may disqualify the bid.
- 2.5. Since time is of the essence, the date of delivery as shown in the Bid may be taken into consideration in the award or in the cancellation of the award for breach of contract.
- 2.6. A contract will be awarded after an evaluation of all bids have been made, and in the interest of suitability to the City's needs and/or economy, equipment, furnishings or service other than the cheapest in price may be selected.

3. EXCEPTIONS TO SPECIFICATIONS

- 3.1. These specifications are based upon design and performance criteria which have been researched and analyzed by the department. Therefore, major exceptions to these specifications will not be accepted.
- 3.2. To the right side of each section for a particular specification, the bidder shall state "YES", "NO" or "EXCEPTION" indicating the exact compliance with the specification.
- 3.3. All deviations and exceptions, no matter how slight, shall be clearly explained in writing with the bid proposal. All exceptions must list the section and fully describe the exception or alternative.
- 3.4. The City of Concord Fire Department may choose to reject bids based on exceptions. Any exceptions that make the SCBA non-compliant with the National Fire Protection

Association's 2013 Edition of NFPA-1981 Standard on Open-Circuit Self-Contained Breathing Apparatus will result in the bid being rejected.

4. WARRANTY INFORMATION

- 4.1. Vendor shall state specifically in the bid the manufacturer's warranty regarding parts and labor, and the duration of the warranty in years. If separate parts of the SCBA/cylinder/facepiece have different warranties, this shall be specified in the bid. The vendor shall state specifically any and all regularly scheduled maintenance and requirements outlined by the manufacturer to maintain any and all warranties.
- 4.2. Additionally, the vendor shall also provide specific information regarding where said maintenance can and/or should be performed (i.e., within Concord Fire Department, manufacturer's service center, etc.).

5. COST OF OWNERSHIP

- 5.1. The vendor and/or manufacturer's representative shall, to the best of their ability, provide documentation and/or information regarding their SCBA's projected "cost of ownership" over a five, ten and fifteen-year period.

6. CONTACT

- 6.1. Questions regarding the specifications should be directed to Logistics Officer Gerald Harris, City of Concord Fire Department, (704) 920-5531 or firelogistics@concordnc.gov.

7. MINIMUM SPECIFICATIONS OF THE SELF-CONTAINED BREATHING APPARATUS

- 7.1. It is the intent of these minimum specifications to describe certain equipment in sufficient detail to obtain competitive bids from qualified vendors for the furnishing and delivery of said equipment to be used by the City of Concord Fire Department. All parts not specifically mentioned which are necessary to provide the described equipment shall be included in the proposal and shall conform in strength and quality or material and workmanship to what is usually provided for the trade in general. Any omissions of components in these specifications are inadvertent and should be included in the proposed SCBA.

	Meets Specifications		
	Yes	No	Exception
7.2. SCBA shall be approved by the National Institute for Occupational Safety and Health (NIOSH), under 42 CFR, Part 84 for chemical, biological, radiological, and nuclear protection (CBRN) with 45 or 60 minute-rated service life and compliant with all requirements of the National Fire Protection Association's 2013 Edition of NFPA-1981 Standard on Open-Circuit Self-Contained Breathing Apparatus.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.3. Units equipped with integrated PASS device must meet requirements of NFPA 1982, 2013 edition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.4. Units equipped with accountability system must meet minimum requirements for FCC part 15 and part 90.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.5. Facepiece	Meets Specifications		
	Yes	No	Exception
7.5.1. Facepiece shall have removable inhalation check valve to prevent exhaled air from entering and contaminating the	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

second stage regulator			
7.5.2. Facepiece shall have an open port to provide miniscule breathing resistance when regulator is not attached.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.3. Facepiece shall not contain electronic components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.4. Facepiece shall provide means to display to user with visual indicators for Heads-Up Display (HUD).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.5. Facepiece shall have icon for HUD system status indicators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.6. Facepiece shall have regulator attachment that does not bear any weight on lens	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.7. Facepiece shall have effective field of view of 86% and overlapping field of view of 122% without attached component	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.8. Facepiece shall be available in three sizes in Hycar Rubber (small, medium, large)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.9. Facepiece shall have a nosecup comprised of silicone rubber and available in three sizes (small, medium, large)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.10. Facepiece shall have three head harness options constructed of flame/heat resistant assembly: 7.5.10.1. Kevlar 4-pt. adjustable Head Harness 7.5.10.2. Kevlar 5-pt. adjustable Head Harness 7.5.10.3. Rubber 5-pt. adjustable Head Harness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.11. Facepiece shall have universal lens that can be used with all three facepiece sizes, shall be comprised of non-shatter type material and shall be field-replaceable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.12. Lens shall be hard-coated on outside and anti-fog coated on inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.13. Facepiece shall have optional flame/heat-resistant fabric neck strap to carry facepiece in ready position for quick donning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.14. Facepiece shall have removable speaking diaphragm with aluminum-coated membrane, suitably protected and located centrally on facepiece for optimal voice projection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.15. Facepiece shall have exhalation valve that is to be serviceable without special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.16. Facepiece shall be capable of water submersion for cleaning and disinfection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.5.17. Facepiece provides optional RFID chip for asset and maintenance tracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.6. Mask-Mounted Regulator	Meets Specifications		
	Yes	No	Exception
7.6.1. The second stage regulator shall be a Push-to-Connect style	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.6.2.	When doffing regulator, regulator disengagement shall simultaneously stop air flow and release regulator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.3.	Regulator shall house electronic module that functions as microphone and HUD system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.4.	Regulator shall be equipped with variable flow bypass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.5.	Regulator shall not have exposed wiring in order to prevent snags and increase product durability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.6.	Regulator shall have a purge cover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.7.	Regulator shall have fewer than 35 parts that are easily replaceable without special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.8.	Regulator shall have a Quick-connect air supply hose that terminates on the shoulder in front of user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.9.	Regulator must be equipped with positive protection Tetraplex Shield membrane that covers diaphragm, preventing permeation of CBRN agents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.6.10.	Regulator shall have optional RFID chip for asset and maintenance tracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.7. Heads-Up Display (HUD)			
7.7.1. Heads-Up Display (HUD) System shall be integrated within regulator, eliminating snag hazards and increase product durability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.2. HUD shall be powered from central power system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.3. HUD System shall eliminate cross-talk among firefighters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.4. HUD System shall be immune to radio frequency interference (RFI) and must function properly in close proximity to fire service hand-held radios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.5. HUD System shall separate pressure indicators from status indicators: 7.7.5.1. Left: status indicators 7.7.5.2. Right: pressure indicators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.6. HUD system shall provide user with remaining cylinder air volume, available in four increments through series of four colored LEDs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.6.1. Four green lights - 76 to 100% cylinder volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.6.2. Three green lights - 51 to 75% cylinder volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.6.3. Two flashing amber lights - 34 to 50% cylinder volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.6.4. One flashing red light - 0 to 33% cylinder volume	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.7. HUD status indicators shall be icon-based and display battery life warning, PASS alarms, EVACUATE indicator,	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

and secondary alarm indicator			
7.7.8. HUD shall incorporate photoelectric sensor that senses ambient light conditions, automatically adjusting display to one of multiple pre-programmed light intensities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.9. Buddy lights shall be visible from outside of firefighter's facepiece	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10. HUD system shall allow user to select from four modes of operation:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10.1. Continuous pressure mode that shall always have pressure LEDs on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10.2. Intermittent pressure mode that shall turn on first three increments when reached for 20 seconds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10.3. Oscillating pressure mode that shall brighten and dim LEDs every 20 seconds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.10.4. Mixed pressure mode that shall turn on first two increments when reached for 20 seconds and last two increments are in continuous mode	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.7.11. HUD shall be field-removable and replaceable without use of special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.8. Universal Air Connection (UAC)			
7.8.1. System shall be capable of:			
7.8.1.1. Refill within immediately dangerous to life or health (IDLH) atmospheres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.1.2. Transfilling between two SCBA wearers (connection allows for donation and receipt of air), providing emergency breathing system (EBS) while maintaining NIOSH approvals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.1.3. Quickly refilling (approximately one-minute duration) SCBA cylinder from mobile compressor, cascade system or RIT pack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.1.4. Extending wearer's air supply over longer duration when remote cascade system or other compressed gas source is located within remote area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.2. Primary UAC shall be illuminated when supply pressure reaches Low Pressure Warning Alarm or can be configured to optional medium pressure warning alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.3. SCBA shall have secondary options for UAC to be mounted on user's waist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.8.4. SCBA shall have pouch equipped with a 3 foot quick-fill hose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.9. Pressure Reducer (First-Stage Regulator) with Primary Low Pressure Warning Device			
7.9.1. Pressure reducer shall incorporate downstream valve to ensure fail-safe design when in open position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.2. Pressure reducer shall incorporate bell alarm mechanism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.2.1. Bell alarm mechanism shall be an air-actuated, continuously ringing audible warning alarm, automatically operating when supply cylinder air pressure reaches approximately 33% of rated service life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.2.2. Bell alarm mechanism shall cover multiple levels of frequencies to cover all hearing levels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.2.3. Bell alarm mechanism shall be user-accessible while wearing SCBA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.3. Pressure reducer reduces cylinder pressure to outlet pressure not to exceed 115 psi; outlet pressure must be adjustable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.4. Pressure reducer shall have flow capacity of 700 liters per minute at full pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.5. Pressure reducer shall have quick-connect cylinder connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.5.1. Quick-connect connection shall not be removable from cylinder while under pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.6. Pressure reducer shall have a remote connection for cylinder connection location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.7. Pressure reducer body shall be constructed of high-strength aluminum alloy and anodized with Teflon hard coat to minimize corrosion and wear of internal and external components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.8. Pressure reducer shall be sealed system that does not allow moisture to enter valve components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.9. Pressure reducer shall have no more than 42 individual regulator replacement parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.10. Pressure reducer shall not require special tools for disassembly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.9.11. Pressure reducer shall have two accessory ports, one medium pressure and one high pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.10. Cylinders			
7.10.1. Cylinders with 4500 psig operating pressure must be available in 45- and 60-minute durations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.10.2. Cylinder shall be constructed of deep-drawn, seamless aluminum liner that is fully wound over entire surface (except for thick neck area) with high-strength carbon fiber filaments impregnated with epoxy resin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.3. Cylinder shall contain cylinder valve that shall incorporate pressure gauge to indicate cylinder pressure at all times. Pressure gauge face shall be luminescent. Hand wheel shall be placed at 90° angle from cylinder axis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.4. Cylinder valve shall be available with remote connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.5. Cylinder valve shall incorporate flow control insert to limit air flow over hand wheel's first half-rotation, minimizing propulsion thrust in event that cylinder is mishandled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.6. Cylinder valve shall incorporate CGA thread that can be converted to quick connect cylinder without special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.7. Cylinder shall have bracket and boot that can be user-installed and provide positioning and added security of cylinder to back plate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.10.8. Delivered cylinders more than 90 days past their manufacture date will not be accepted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Meets Specifications		
	Yes	No	Exception
7.11. PASS Device			
7.11.1. PASS device shall contain the power, control and battery modules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.2. Power module shall provide power to all electronic SCBA components from the battery module and act as central power system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.3. Power module shall act as central command center, distributing all information and data among electronic components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.4. Battery module shall be powered by six C-cell batteries or one lithium-ion rechargeable battery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.5. Expected battery service life batteries shall be 3 to 5 months on average with telemetry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.6. PASS device shall be designed for battery level check and removal of batteries while SCBA remains in jump seat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.7. Power module shall be capable of illuminating UAC fitting when supply cylinder reaches 33% of rated service time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.8. Control module shall have analog and digital display for added redundancy. Analog gauge must be positioned above digital display as viewed by user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.11.9.	Control module shall be equipped with full color graphical display. Display shall be reprogrammable and capable of future integrations. The display's background color shall coordinate with HUD pressure status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.10.	Control module shall automatically provide information to user when placed in upright position. Device can be manually activated by pressuring reset button	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.11.	PASS device shall use single line to connect power and control module	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.12.	Control module shall have two reset buttons that perform same function no matter which button is pressed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.13.	PASS device shall be capable of being reprogrammed to fire department standard operating procedures (SOP). Using PC software program, configuration tag can be created and tagged on each device needed. Reprogramming options are as follows: 7.11.13.1. Medium pressure alarm 7.11.13.2. Pressure drop alarm 7.11.13.3. Primary temperature alarm 7.11.13.4. Secondary temperature alarm 7.11.13.5. Audible low pressure alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.14.	PASS device shall be equipped with buddy lights on firefighter's front and back and viewable from 360° view; two buddy lights on front of user and four buddy lights in back of user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.15.	PASS device shall have colored buddy lights: green (pressure above 50% and no alarms), yellow (pressure between 34 and 50%) or red (below 34% or alarms are active)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.16.	Power module shall be equipped with dual sound emitters; sound emitters shall perform at minimum 100 dBa in room temperature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.17.	PASS device shall be capable of storing up to 25 hours of use information in event log form that are generated each time SCBA is pressurized. Event logs must indicate on/off cycles, alarms, alarm reset, and tagging events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.18.	PASS device shall be capable of storing periodic logs. Periodic logs must indicate cylinder pressure for each SCBA pressurization stored at 15-second intervals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.19.	PASS device's event and periodic logs shall provide ability to download to personal computer for maintenance records or for use in incident investigations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.20.	PASS device shall be immune to radio frequency interference (RFI) and must function properly in close proximity of fire service hand-held radios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.21.	PASS device shall have optional time-remaining display. Time remaining function must update calculations every 30 seconds based upon user's previous three minutes of air consumption. Initial calculation will appear after three	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

minutes. Calculations can be made to zero pressure, low pressure alarm or medium pressure alarm			
7.11.22. PASS device shall employ gasket perimeter seal to provide highest protection level against water ingress, while providing ability to upgrade or repair electronics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.23. PASS device shall be capable of electronically storing user's name into memory via ID tag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.24. PASS device shall be removable with no more than two screws	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.25. Control module shall have service mode that provides ability to see number of hours used, connect to PC and firmware versions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.26. Control module shall incorporate rubber boot for added protection and is to be replaceable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.27. Power and Control Modules shall have optional RFID chip for asset and maintenance tracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.11.28. The PASS device shall be capable of transmitting the following information to a remote base station receiving unit for accountability purposes 7.11.28.1. Firefighter name, truck or team assignment, cylinder pressure, service time remaining, PASS alarms (motion or manual) thermal alarms, battery status, radio connectivity and evacuation acknowledgement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.12. Speaker Module	Meets Specifications		
	Yes	No	Exception
7.12.1. Speaker module shall provide amplified speech that removes inhalation breath noise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.2. Speaker module shall provide at minimum, 70 dBa output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.3. Speaker module shall turn on and off with PASS device	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.4. Speaker module shall be powered by central power system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.5. Speaker module shall be capable of passing NFPA heat and immersion leakage test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.6. Speaker module shall be positioned on chest and attached to shoulder straps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.7. Speaker module shall be capable of being mounted on either shoulder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.8. Speaker module shall easily be attached and removed without special tools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.9. Speaker module shall have light to indicate that device is powered on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.12.10. Speaker module shall have on/off button to allow user to manually power off as needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.13. Carrier and Harness	Meets Specifications		
	Yes	No	Exception
7.13.1. Shoulder harness shall have separate left and right pads for easier and less costly replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.2. Shoulder harness shall have retro-reflective markings for better visibility within low light conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.3. Shoulder harness shall have localized frictions pads on shoulders to prevent slippage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.4. Shoulder harness shall have an adjustable chest strap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.5. Harness design shall have Kevlar webbing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.6. Shoulder harness shall have accessory attachment point available for facepiece or pouch and can be moved from left to right shoulder strap or vice versa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.7. Shoulder harness shall differentiate pad inside from pad outside by color; pad inside is grey and outside is black	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.8. Waist pad shall be adjustable swiveling – standard pad attached to metal bracket that has three positions and automatically centers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.9. Adjustable swiveling waist pad shall be one-handed operation and can be performed while on user's back	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.10. Back plate shall have two side handles and one top handle that are accessible with gloved hand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.11. Back plate side handles shall be capable of 500 lbs. of force	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.12. Back plate top handle shall be capable of 1000 lbs. of force	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.13. Back plate cylinder band shall be metal and easily adjust to accommodate different cylinder sizes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.14. Waist pad shall be of rigid construction to allow for easy donning and support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.15. Waist straps shall be double-pull forward design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.16. Harness design shall have regulator keeper for storage that can be attached to waist strap or chest strap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.13.17. Regulator keeper shall allow regulator to be connected at any angle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. OPTIONS

8.1. The City of Concord Fire Department has identified the following options that it will consider in addition to the minimum specifications. Additional options will be considered given they fall within the available budget for the project.

8.2. OPTION A	Meets Specifications		
	Yes	No	Exception
8.2.1. Accountability system to include base station, tags, tag reader/writer and software.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.3. OPTION B	Meets Specifications		
	Yes	No	Exception
8.3.1. Radio interface to Motorola APX6000XE portable radio to allow ease in communication.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.4. OPTION C	Meets Specifications		
	Yes	No	Exception
8.4.1. Factory labeling of SCBA backpack/harness to identify ownership and to include Concord Fire Department inventory numbering system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.4.2. Factory labeling of cylinders with a Concord Fire Department logo as an integral part of the cylinder wrap, add on or glued on stickers are not acceptable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.5. OPTION D	Meets Specifications		
	Yes	No	Exception
8.5.1. Trade-in allowance (credit) for existing SCBA inventory. (See LIST OF PRESENT SCBA SUPPLIES FOR TRADE-IN ALLOWANCE). The City of Concord Fire Department solely reserves the right to exercise or not exercise this option. Any trade in allowance (credit) will be applied towards the purchase of SCBAs, related components, and/or testing/training costs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.6. OPTION E	Meets Specifications		
	Yes	No	Exception
8.6.1. Emergency Air Supply System (RIT Pack). The air source shall consist of the following components:			
8.6.1.1. A carrying bag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.2. External pressure gauge (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.3. An audible low-pressure alarm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.6.1.4. A Universal Air Connection (UAC) high- pressure emergency airline that will function with any manufacturers NFPA 1981, 2002 compliant or newer self-contained breathing apparatus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.5. A low-pressure airline hose assembly with a low-pressure manifold that has a male and female quick disconnect and additional ports to allow the use of other SCBA manufacturer's low-pressure fittings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.6. A RIT Style facepiece (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.6.1.7. A second stage pressure regulator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.7. OPTION F	Meets Specifications		
	Yes	No	Exception
8.7.1. Upgrade of Concord Fire Departments existing RIT packs to be compatible with the new SCBA.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.8. OPTION G	Meets Specifications		
	Yes	No	Exception
8.8.1. Supplied Air Respirator (SAR) harness assemblies and cylinders. These shall consist of a Kevlar adjustable waist strap and padded adjustable shoulder strap. The unit shall be equipped with a 10-minute escape cylinder.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.9. OPTION H	Meets Specifications		
	Yes	No	Exception
8.9.1. Upgrade of Concord Fire Departments existing SAR units to be compatible with the new SCBA facepiece.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.10. OPTION I	Meets Specifications		
	Yes	No	Exception
8.10.1. Air Purifying Respirator adaptor with twin cartridges to be used with the SCBA facepiece	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8.11. OPTION J	Meets Specifications		
	Yes	No	Exception
8.11.1. 100 foot sections of supplied breathing air lines with fittings that are compatible SAR units.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Meets Specifications		
8.12. OPTION K		Yes	No	Exception
8.12.1.	TSI 8030 PortaCount Pro Respirator Fit Tester	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Meets Specifications		
9. TRAINING AND FIT TESTING		Yes	No	Exception
9.1.	The successful bidder shall provide, at no cost to the department, a technician level maintenance training class to six (6) members of the department at the manufacturer's location. A description of how this training will be performed shall be included in the proposal. Required tools for performing repairs, maintenance, and flow testing, and PC interface for PASS alarm (with software) shall be provided at this training.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.2.	The successful bidder will submit a plan for training all department personnel how to use the SCBA. The training program shall be in a Power Point or similar format.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.3.	The successful bidder shall provide initial fit testing for all members of the fire department. The fit testing shall comply with quantitative fit testing protocol per OSHA 1910.134 Appendix A Part I.c.3 (CNC (PortaCount) protocol). Fit testing shall include proper fit for each user with all sizes of face piece and nose cup being utilized to insure an adequate fit test is achieved. A computer generated report shall be provided to the department. The report shall include the information specified in OSHA 1910.134(m) records.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Meets Specifications		
10. SPARE PARTS		Yes	No	Exception
10.1.1.	The manufacturer shall provide to the department enough parts and maintenance supplies to repair the SCBA's so they can be placed back in service while waiting on warranty parts to be delivered. This should include, as a minimum, the following components: 10.1.1.1. 4 – Complete second stage regulators 10.1.1.2. 4 – Complete control modules 10.1.1.3. 4 – Complete first stage pressure reducer and low air alarms 10.1.1.4. 4 – Complete sets of straps (shoulder, chest and waist belts) and lumbar pads 10.1.1.5. 2 – PASS modules 10.1.1.6. 2 – Speaker modules 10.1.1.7. O-rings and seals for second stage regulator 10.1.1.8. 4 – UAC fittings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.1.2.	The manufacturer shall provide a complete parts list with prices for the SCBA, Facepiece and Cylinder. This shall be included with the bid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. PRICING	Meets Specifications		
	Yes	No	Exception
11.1. The vendor shall provide a guaranteed purchase price on the items and quantities for a period of twelve (12) months.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.2. Pricing shall also be extended to all Cabarrus County, North Carolina public safety agencies to include police, fire and emergency medical providers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REQUIRED QUANTITIES AND PRICING

Item #	Quantity	Description	Price Each	Total Price
1	150	2013 Edition of NFPA-1981 4500 psig Compliant SCBA		
2	300	4500 psig, 45 minute rated, low profile, Carbon-Wrapped cylinder		
3	24	4500 psig, 60 minute rated, Carbon-Wrapped cylinder		
4	200	Facepiece		
5	200	Facepiece Bags, with drawstring closure, ID window and clip for securing bag.		
6	20	Carrying cases for SCBA		
7	1	Updated software for Posi-Chek 3 USB		
8	2	Fit test adaptors for use with a TSI PortaCount		
9	25	Spectacle kits for use with facepiece		
10	1	Shipping Cost		
Total Price of Required Items				

Delivery time for required quantities to Concord Fire Department once the order is placed will be _____ days.

12. OPTION PRICING

Option	Quantity	Description	Price Each	Total Price
A	6	Accountability base stations and software		
A	200	Accountability RFID tags		
A	1	Accountability RFID tag reader/writer		
B	18	Radio interface for Motorola APX6000XE		
C	150	Factory labeling of SCBA backpack/harness		
C	324	Factory labeling of Cylinders with fire department logo		
E	10	Emergency Air Supply System (RIT Pack)		
G	6	Supplied Airline Respirators (SAR) with 10 minute escape cylinder		
I	150	Air Purifying Respirator (APR) adaptors		
I	300	P100, plus OV, CL, SD, CD, HC, HS, AM, MA, FM and MV Filter cartridges for use with APR adaptors		
J	12	100 foot sections of supplied breathing air lines with fittings that are compatible SAR units.		
K	1	TSI 8030 PortaCount Pro Respirator Fit Tester		
Total Price of Options				

13. UPGRADE OPTION PRICING

Option	Quantity	Description	Price Each	Total Price
A	3	Upgrade of current accountability base stations and software to be compatible with the new SCBA		
F	7	Upgrade of existing RIT packs to be compatible with the new SCBA		
H	6	Upgrade of existing SAR units to be compatible with the new facepiece		
Total Price of Upgrade Options				

14. TRADE IN QUANTITIES – OPTION D

Item #	Quantity	Description	Price Each	Total Price
1	123	MSA Firehawk PTC SCBA		
2	10	MSA M7 PTC SCBA		
3	Approx. 265	MSA 4500 psig 45 minute cylinders		
4	Approx. 26	MSA 4500 psig 60 minute cylinders		
5	Approx. 190	MSA Ultra Elite Facepieces		
Total Credit for Trade In Items				

**CITY OF CONCORD FIRE DEPARTMENT
REQUEST FOR BIDS ON
SELF-CONTAINED BREATHING APPARATUS**

I, _____, as an authorized signer for my company hereby certify that the figures contained in this Bid Proposal are accurate and correct. I also have read and understand the specifications for the City of Concord, North Carolina, Self-Contained Breathing Apparatus and submit this Bid Proposal for consideration.

Signed _____

Print Name _____

Title _____

Company _____

Mailing Address _____

Phone _____

Date _____