

**HENDERSON COUNTY GOVERNMENT/BOARD OF EDUCATION  
IS SEEKING BIDS ON THE FOLLOWING.**

DESCRIPTION OF SERVICE/PRODUCT:	<p style="text-align: center;"><b>SELF-CONTAINED BREATHING APARATUS</b></p> <ul style="list-style-type: none"> <li>• 44 NFPA 1981,2013 Edition compliant SCBA</li> <li>• 44 Spare 4500psi 45 minute cylinder and valve assemblies</li> </ul>
CONTACT FOR ADDITIONAL INFORMATION:	LYNN MURPHY, <a href="mailto:firechief@hendersoncountyttn.com">firechief@hendersoncountyttn.com</a> or 968-4153.
ADDRESS TO MAIL/BRING BIDS:	<p>Henderson County Finance 17 Monroe St, 2<sup>nd</sup> Floor PO Box 495 Lexington, TN 38351</p>
DATE/TIME BIDS MUST BE RECEIVED AND WILL BE OPENED:	January 26, 2015 8:30am
ADDITIONAL BID REQUIREMENTS:	Specific requirements can be seen at <a href="http://www.hendersoncountyttn.gov">www.hendersoncountyttn.gov</a> , Finance, Bids or by contacting Mr. Murphy.
EEO:	<p>Henderson County Government/Highway/Solid Waste/ Henderson County BOE reserves the right to reject any and all bids. Henderson County Government/Highway/Solid Waste/ Henderson County BOE is an equal opportunity employer. Henderson County Government/Highway/Solid Waste/ Henderson County BOE is prohibited from discrimination based on race, color, national origin, sex, age, or disability. Complaints regarding discrimination should be filed with Director, Office of Civil Rights, 1400 Independence Av S.W., Washington, DC 20250. <a href="http://www.hendersoncountyttn.gov">www.hendersoncountyttn.gov</a></p>

It is the intent of the Henderson County Fire Department to replace the current fleet of breathing apparatus. This bid specification is to establish the minimum requirements for open-circuit self-contained breathing apparatus (SCBA). All SCBA, components and systems shall be 2013 Edition NIOSH approved at the time of bid.

Quantities:

- 44 NFPA 1981, 2013 Edition compliant SCBA. To include:
- Full facepiece assembly
  - A removable, facepiece-mounted, positive pressure breathing regulator
  - An automatic dual path redundant pressure reducing regulator
  - End of service indicators
  - A harness and back frame assembly for supporting the equipment on the body of the wearer
  - A shoulder strap mounted, remote gauge indicating cylinder pressure
  - A rapid intervention crew/universal air connection (RIC/UAC)
  - Cylinder and valve assembly for storing breathing air under pressure
- 44 Spare 4500psi 45 minute cylinder and valve assemblies

The successful bidder shall deliver all materials within 90 calendar days of the issuance of the purchase order. Failure to meet the delivery will result in immediate cancellation of the purchase order and Henderson County Fire Department will award the bid to the next most responsive bidder.

COMPLY \_\_\_\_\_ NON-COMPLY \_\_\_\_\_ INITIALS \_\_\_\_\_

The successful bidder shall deliver 2 specified SCBA, facepieces and 4 cylinders within 30 days from the awarding of the contract for the purpose of training.

COMPLY \_\_\_\_\_ NON-COMPLY \_\_\_\_\_ INITIALS \_\_\_\_\_

The successful bidder must be authorized by the manufacture to sell the equipment specified herein. A signed document from the manufacture confirming this must be included with the bid.

COMPLY \_\_\_\_\_ NON-COMPLY \_\_\_\_\_ INITIALS \_\_\_\_\_

The successful bidder shall have a factory authorized service center in the state of Tennessee and maintain a sufficient supply of replacement parts to expedite needed emergency repairs. Bidders shall provide a letter stating the location of their service center and include a copy of their current business license from the city where their business is located. The letter must be signed by an officer of the company.

COMPLY \_\_\_\_\_ NON-COMPLY \_\_\_\_\_ INITIALS \_\_\_\_\_

The successful bidder shall provide a list of no less than 10 customers that have taken delivery of the exact specified SCBA – no deviations. This list shall include applicable contact name, organizational name, address, and telephone number.

COMPLY \_\_\_\_\_ NON-COMPLY \_\_\_\_\_ INITIALS \_\_\_\_\_

The Henderson County Fire Department shall have the right to request Bidders to produce a sample of the specified SCBA and components for the purpose of bid evaluation at no cost to Henderson County. If requested the samples will be submitted within 10 calendar days after receipt of the written notice. Failure to comply may result in rejection of the bid.

COMPLY \_\_\_\_\_ NON-COMPLY \_\_\_\_\_ INITIALS \_\_\_\_\_

All Bidders shall provide a list of Exceptions to the specifications on a separate page of paper. The list shall provide the exception and evidence of compliance.

COMPLY \_\_\_\_\_ NON-COMPLY \_\_\_\_\_ INITIALS \_\_\_\_\_

Attached to bid proposal is the complete required and recommended yearly maintenance schedule. Including all cost associated with compliance and warranty requirements. This schedule will list years (1) one thru year (15) fifteen. NO EXCEPTIONS

COMPLY \_\_\_\_\_ NON-COMPLY \_\_\_\_\_ INITIALS \_\_\_\_\_

The successful bidder shall include factory certified training at no cost to Henderson County Fire Department to no less than 2 technician candidates. This will allow the Henderson County Fire Department to perform routine maintenance and repair of the equipment including annual flow test. If the technician training that is provided is in excess of 50 miles from Henderson County Fire Department – Lexington TN, then the bidder shall be required to arrange for tuition, travel, meals and lodging for the technician candidates.

COMPLY \_\_\_\_\_ NON-COMPLY \_\_\_\_\_ INITIALS \_\_\_\_\_

<b>Approvals</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exception</b>
The SCBA shall be approved to NIOSH 42 CFR, Part 84 for chemical, biological, radiological and nuclear protection (CBRN). No Exceptions			
The SCBA shall be compliant to the NFPA 1981, 2013 Edition, Standard on Open-Circuit Self-Contained Breathing Apparatus for Emergency Services. No Exceptions			
The SCBA shall be compliant to the NFPA 1982, 2013 Edition, Standard on Personal Alert Safety Systems (PASS). No Exceptions.			
All material used on the SCBA shall be of fire resistive material. This is to include any shoulder strap, hip pad, and storage pouch.			
The specified SCBA shall be able to operate at pressures of 4500 psig.			
All electronics shall be waterproof. They should also be to where the user can change the batteries with no special tools. The electronic components shall be able to be submerged in water without fear of failure.			
<b>Facepiece Requirements</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exception</b>
The facepiece shall be designed so that it can be submerged during decontamination and cleaning without the need to remove any electronic components.			
The facepiece shall be able to be separated from the second stage regulator.			
The full facepiece assembly shall fit persons of varying facial shapes and sizes with minimum visual interference.			

The full facepiece assembly shall be available in three sizes that are clearly marked "S" for Small, "M" for Medium, and "L" for Large.			
The facepiece assembly, including the head harness, shall be latex free.			
The lens shall be a single, replaceable, configuration constructed of non-shatter type poly carbonate material.			
In accordance with NIOSH 42 CFR part 84, the facepiece must meet penetration and impact requirements, including compliance with ANSI Z87.1 – 2010.			
The lens shall have a coating to resist abrasion and chemical attack and meet the requirements of NFPA – 1981 for lens abrasion.			
The lens shall have an integral anti-fog coating to reduce fogging of the lens.			
The facepiece shall enable the installation of communications capabilities.			
A hook should be placed somewhere on the harness to allow for attachment of the facepiece to the shoulder strap while it is not in use.			
The head harness shall be a five-point suspension made in the fashion of a net hood to minimize interference between securing of the facepiece and the wearing of head protection, and be constructed of a para-aramid material for fire, first responder and CBRN applications.			
<b>Second Stage Regulator</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exception</b>
The second stage regulator will be designed so that it can be submerged during decontamination and cleaning without the need to remove any electronic components.			

The second stage regulator will be separable from the facepiece without having to use special tools or finger managed screws.			
The second stage regulator will be separable from the facepiece by the use of only one hand.			
A storage holster for the regulator shall be provided on the user's left side on the waist strap.			
The hose supplying the second stage regulator shall be on the left shoulder of the user.			
The regulator shall include an optional quick connect coupling in line to allow the breathing regulator to be disconnected from the unit and reconnected to the auxiliary hose of a second unit in the event a rescue is required.			
The optional quick connect coupling shall be easily connected and disconnected by trained individuals with a gloved hand.			
The supply hose shall be equipped with a swivel at the connection between the hose and regulator.			
The user shall hear an audible sound when the regulator is attached correctly to the facepiece.			
The second stage regulator will be provided with a bypass or purge valve.			
<b>Rapid Intervention Connection</b>	<b>Meet</b>	<b>Does Not Meet</b>	<b>Exception</b>
The SCBA shall incorporate a RIC/UAC fitting to be compliant with the 2013 edition of the NFPA 1981 Self Contained Breathing Apparatus standard.			

The RIC/UAC connection shall be a part of the high pressure hose that attaches the cylinder valve to the first stage regulator.			
The RIC/UAC connection shall allow for attaching a high pressure source and a self-resetting relief valve allowing for a higher pressure than that of the SCBA to be attached to the SCBA.			
The RIC/UAC connection shall have a check valve to prevent the loss of air when the pressure source has been disconnected.			
<b>First Stage Regulator</b>	<b>Meet</b>	<b>Does Not Meet</b>	<b>Exception</b>
The pressure reducing regulator/first stage regulator shall be mounted at the waist on the back frame and be coupled to the cylinder valve through a stainless steel quick connect snout for engagement and sealing within the cylinder valve outlet.			
The cylinder shall be secured to the pressure-reducing regulator with two pull-rings 180° from each other.			
A stainless steel rod shall secure each of the pull-rings. The stainless steel rods shall be actuated when the cylinder is opened and when cylinder pressure is above 50 psig.			
<b>Cylinder</b>	<b>Meet</b>	<b>Does Not Meet</b>	<b>Exception</b>
Cylinders shall be manufactured to meet DOT specifications and be NIOSH and NFPA approved.			
Cylinders shall be designed to store and operate at pressures of 4500 psig.			
Cylinders shall be of 45 minute duration.			

Cylinders shall be lightweight and consist of a carbon fiber wrapped design.			
Cylinders shall have a hydrostatic test of no less than 5 years. Cylinders shall have a life expectancy of no less than 15 years.			
The date of manufacture for the SCBA cylinders shall be within 60 days of the date of delivery of the specified cylinders.			
Cylinders shall have glow in the dark stripes to allow for visibility in low light conditions. The striping will not be in an area that will cause it to be covered by the retaining strap of the backpack frame.			
Cylinder stripes will fully encircle the cylinder.			
Cylinder stripes shall be protected by a layer of clear protective coating.			
The cylinder valve shall be designed with a quick connect that delivers air directly to the first stage pressure reducing regulator.			
Each cylinder and valve assembly shall be equipped with a hanger bracket for positive locking attachment of the assembly to the backframe.			
<b>Backpack Harness and Frame Assembly</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exception</b>
The frame should have two points of attachment for the cylinders. One near the pressure reducer/first stage regulator and one securing the cylinder to the frame.			
The cylinder attachment must be capable of holding cylinders of different diameter (30, 45, and 60 minute cylinders). The one securing the cylinder cannot be of the Velcro type.			

The backframe shall be a solid, one-piece black powder-coated aluminum frame that is contoured to follow the shape of the user's back.			
The frame shall include a mounting for the pressure reducer/first stage regulator.			
The frame shall include integrated handles to allow for carrying of the pack while it is not in use.			
The harness shall include shoulder pads and hip pads.			
The frame should be lightweight and have a lumbar support and be padded for comfort.			
Quick release type parachute buckles shall be used for the shoulder straps.			
All straps shall be of sufficient size to allow for "over the head" or "coat style" donning methods.			
A snap hook retainer shall be provided on the shoulder strap to allow for the hanging of the facepiece while it is not in use.			
The shoulder straps should be made to hold the second stage regulator hose to keep the hose from hanging loosely.			
The shoulder straps shall have reflective material on the outside of the strap to increase visibility in low light areas.			
The shoulder strap shall be equipped with a drag rescue loop capable of being deployed in a situation where a down firefighter needed to be dragged to safety.			

<b>Shoulder Mounted Pressure Gauge</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exceptions</b>
The gauge shall be lit, both electronically and glow in the dark, to allow for visibility in dark atmospheres. This lighting should include glow in the dark so as to allow for visibility in case of battery failure.			
<b>Electronics Operating System</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exceptions</b>
The electronics for the HUD and PASS shall be operated by a single power source containing six "AA" batteries.			
The battery life of the SCBA with PASS only shall be no less than 200 hours.			
The system shall have a battery check indicator that provides the status of the battery while the SCBA is not in use.			
The system shall contain a photo sensing diode to brighten and dim the HUD display as the environment changes.			
<b>Personal Alert Safety System (PASS Device)</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exceptions</b>
The PASS device shall be compliant with the NFPA 1982, 2013 Edition Standard on Personal Alert Safety Systems.			
The PASS device shall be automatically engaged (turned on) with the pressurization of pneumatic system.			
The PASS device shall have manual capabilities to allow for the activation of the alarm without the system being pressurized.			

The Pass device shall have push buttons for the manual operation. These should be small enough to not allow for accidental activation yet large enough to be activated by the user while wearing gloves.			
The PASS device shall be integrated into HUD display. This shall allow for the user to see distinct lights for the PASS activation.			
The Pass device shall allow to be reset by movement when in the pre alert mode. This shall be hands free movement.			
The Pass device shall include light indicators for operation. Full alarm, normal operation, low battery etc.			
The PASS device system shall have sensors mounted to the backpack frame to reduce false activations. These should be mounted in an area to maximize use but be protected from damage.			
<b>Firefighter Locator System Integrated Into the PASS</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exceptions</b>
The PASS system shall have the capabilities to be field upgradable to add a firefighter locator system at a later date if needed.			
When the PASS is manually activated, the locator system shall immediately emit a 2.4 GHz signal to be received by a separate hand-held receiver.			
When the PASS is activated due to lack of motion, the locator system shall have a ten second delay prior to emitting a 2.4 GHz signal to be received by a separate hand-held receiver.			
The system shall utilize a 2.4 GHz signal to provide the best path to a "downed" firefighter.			
The locating system shall be wirelessly programmable with eight alpha-numeric characters to provide identification information.			

<b>Low Air Alarm Indicator</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exceptions</b>
The SCBA system shall have at least two types of indicators to warn the user of low air situations. A tactile alarm and Heads Up Display (HUD).			
The primary alarm must not rely on any electronics. Must be audible with simultaneous vibration of the facepiece.			
The secondary alarm will be HUD and shall be powered by the SCBA's single power supply.			
The HUD device will indicate when the air system is at pressures of 100%, 75%, 50% and 33%.			
The HUD display will have distinct indicating lights for 50% and 33% pressures.			
The HUD display shall have a low battery indication that is distinct and distinguishable from the bottle pressure indications.			
<b>Emergency Breathing Support System "Buddy Breathing"</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exceptions</b>
There shall be an optional Dual Emergency Breathing Support System (EBSS) approved to NIOSH 42CFR, Part 84 and NFPA 1981, 2013 Edition available at time of bid deadline.			
The Dual EBSS shall have one of each of the following requirements; (1) a manifold with one each of a female socket and male plug, both of which have check valves, (2) 40" minimum low-pressure hose, (3) a pouch for storing the hose, and (4) a dust cap for the female socket and male plug.			
The Dual EBSS system shall be on the wearer's left side and shall be capable of allowing for six feet of hose between like systems.			

<b>Voice Amplifier Capabilities</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exceptions</b>
The SCBA system shall have available an optional facepiece mounted voice amplification device to electronically project the user's voice.			
The device shall weigh no more than 7 ounces and shall not exceed 3.50 inches in length, 2.0 inches in width, and shall not extend further than 1.75 inches from the built in voice emitter.			
The amplifier shall have an automatic shutdown so that it powers down if it is accidentally left on.			
The amplifier shall have an illumination system to show when the system is in use. This shall also have a low battery indicator.			
The device shall have the ability to be upgraded to a radio			
<b>Warranty</b>	<b>Meets</b>	<b>Does Not Meet</b>	<b>Exceptions</b>
The unit shall be covered by a warranty providing protection against defects in materials or workmanship.			
The warranty shall be for a period of no less than 10 years on the SCBA, except for the pressure reducer, which shall be covered for no less than 15 years.			
Electronic components shall be warranted for no less than 5 years.			

<b>Qty</b>	<b>Description</b>	<b>Each</b>	<b>Extended</b>
44	Base SCBA – No Options - Per Henderson County Bid Specification: (1) SCBA, (1) Facepiece, (2) 45 Minute Carbon Cylinders		
	Total Base Price Bid		

**Optional Features & Equipment**

<b>Qty</b>	<b>Description</b>	<b>Each</b>	<b>Extended</b>
1	Quick Connect Face Piece Mounted Regulator		
1	Spare 45 Minute Carbon Cylinder		
1	Extra SCBA Mask		
1	Electronic Voice Amp with Mounting Bracket		
1	Dual EBSS – "Buddy Breather"		
1	Integrated PASS Firefighter Locator System		
1	RIT PAK – (Carry Bag, Shoulder Strap, 6' EBSS, 5' RIC Hose, Facepiece, Regulator, 60 minute 4500psi Carbon Cylinder)		
1	Rubber Headpiece For SCBA Mask (Headpiece Only – No Mask)		