

Harris Township, Ottawa County
Offices in the Harris-Elmore Fire & EMS Station
321 Rice St., P.O. Box 341
Elmore, Ohio 43416
www.harristownshipohio.com

Trustees: Carol A. Baker
Beverly Haar, Chairman
Jerald A. Haar

Fiscal Officer: Laura Hazel

October 10, 2018

Bid Requestor: Harris Township
321 Rice Street, PO Box 341
Elmore, Ohio 43416

To All Interested Bidders:

Harris Township will receive sealed bids subject to the conditions contained herein until 4:00 pm, Monday, November 5, 2018. All bids received according to the specified conditions will be publicly opened and read at 6:30 pm, Monday, November 5, 2018, at the Harris-Elmore Fire Station, 321 Rice Street, Elmore, OH, 43416. The bids requested are for the proposed firefighting self-contained breathing apparatus (SCBA) in accordance with plans and specs as adopted by the Harris-Elmore Fire Department and detailed in these specifications.

The Specifications and Bid Documents contained in this document package are available via the Harris Township Website: <http://www.harristownshipohio.com/announcements.htm>

or via email by contacting Fire Chief, Jim Wilburn, at jwilburn@harristownshipohio.com to request a copy of the Specifications and Bid Documents.

Harris Township reserves the right to reject any and all proposals and to waive any technicalities.

Bids will be chosen based upon the best and most appropriate bid and not necessarily based upon the lowest bid.

By order of
Laura Hazel
Harris Township Fiscal Officer

INSTRUCTIONS TO BIDDERS

1. Each Proposal shall be legibly written or printed in ink on the Proposal provided in this bound copy of the proposed Contract Documents. No alterations in proposals, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable unless each such alteration is signed or initialed by the Bidder. If initialed, the bidder may be required to identify any alteration so initialed. No alteration in any proposal, or in the proposal form on which it is submitted, shall be made by any person after the Bidder has submitted the Proposal.

Any and all addenda to the Contract Documents, on which a proposal is based, properly signed by the Bidder shall accompany the Proposal when submitted.

Each Proposal submitted shall be enclosed in a sealed envelope, addressed to Harris Township Board of Trustees, Attn.: Fire Chief Jim Wilburn, Harris-Elmore Fire Department, 321 Rice Street, PO Box 341, Elmore, Oh 43416. The envelope must also show in the lower right corner the words "Harris-Elmore Fire Department; Self-Contained Breathing Apparatus." All envelopes will be received and filed with the Board of Harris Township Trustees by the above established cut-off date and time.

2. Each Bidder shall carefully examine the Specifications and other Contract Documents, shall fully inform him/herself of all conditions affecting the work or the cost thereof, and shall be presumed to have done so and their bid shall be based upon their own conclusions. Each Bidder shall inform themselves concerning all Federal, State, and local laws, ordinances, or regulations, which may in any manner affect their proposed operations of construction, or those engaged or employed on the work or the material or equipment. Should a Bidder find discrepancies in, or omissions from, the Specifications or other Contract Documents, he should at once notify the Fire Chief and obtain clarification or interpretation prior to submitting any bid. Any interpretation of the proposed Contract Documents will be made only by addendum duly issued and a copy of such addendum will be mailed or delivered to each person obtaining a set of such documents from the Fire Chief. The Harris Township Board of Trustees (herein known as The Board) and The Harris-Elmore Fire Department (herein known as HEFD) will not be responsible for any other explanations or interpretations of the proposed Contract Documents.
3. All sales and use taxes, as well as other taxes, that might lawfully be assessed against The Board in the execution and performance of the proposed contract and work covered thereby and are to be paid by the contractor from monies obtained in satisfaction of their contract. It is to be understood by all bidders that the bid price or prices submitted shall include the total cost of all such taxes.

4. No bidder may submit more than one proposal. Two proposals under different names will not be received from one firm or association.
5. No bidder may withdraw their proposal for a period of thirty (30) days after the date and hour set for the opening herewith. A bidder may withdraw their proposal at any time prior to the expiration of the period during which proposals may be submitted, by written request of the same person or persons who signed the proposal.
6. The Board reserves the right to accept the bid, which in its judgment is the lowest and best bid; to reject any or all bids; and to waive irregularities or informalities in any bids submitted. Bids received after the specified time of closing will be disposed of without review.
7. None of the Instructions to Bidders, Proposal, Contract Payment and Performance Bonds, Contract Agreement, General Conditions, Special Conditions, Specifications, and other documents shall be removed from the bound copy of the "Contract Documents" prior to filing the Proposal contained therein.
8. Each Bidder shall sign their proposal, using their usual signature, and giving their full business address. Bids by Partnerships shall be signed with the Partnership named, followed by the signature of one of the members of the Partnership or by an authorized representative and designation of the person signing. Bids by Corporations shall be signed with the name of the Corporation, followed by the signature and designation of the President, Secretary, or other person authorized to bind it in the matter. The names of all persons signing should also be typed or printed below the signature. A bid by a person who affixes to their signature the word "President", "Secretary", "Agent", or other designation, without disclosing their Principal, may be held to be the bid of the individual signing. When requested by The Board, satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.
9. Deviations to Specifications and Requirements When bidding on an "or equal," Bids must be accompanied with all descriptive information necessary for an evaluation of the proposed material or equipment such as the detailed drawings and specifications, certified operation and test data, and experience records. Failure of any bidder to furnish the data necessary to determine whether the product is equivalent, may be cause for rejection of the specific item(s) to which it pertains. All deviations from the specifications must be noted in detail by the bidder on the Affidavit of Compliance form, at the time of submittal of Bid. The absence of listed deviations at the time of submittal of the Bid will hold the bidder strictly accountable to the specifications as written. Any deviation from the specifications as written and accepted by The Board may be grounds for rejection of the material and/or equipment when delivered.
10. Irrevocable Offer Any Bid may be withdrawn up until the due date and time set for opening of the Invitation for Bid (IFB). Any Bid not so withdrawn shall, upon opening, constitute an irrevocable offer for a minimum period of 90 days to sell to The Board the goods or services set forth in the IFB, until one or more of the Bids have been duly accepted by The Board.
11. Delivery of said items shall be F.O.B. Destination.

BID

PROPOSAL OF _____
 (herein known as Bidder) organized and existing under the laws of the State of _____
 doing business as _____.

To the Harris Township Board of Trustees (herein known as The Board). In compliance with your Advertisement for Bids, Bidder hereby proposes to deliver products specified in strict accordance with the Contract Documents, within the time set forth therein, and at the prices stated below.

By submission of this Bid, each Bidder certifies, and in the case of a joint Bid, each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with another Bidder or with any competitor.

ITEM	QTY	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1	21	Complete Self-Contained Breathing Apparatus to include 4500 psi. / 45-minute bottle, Harness, Facepiece and Voice Amplifier. Must meet the NFPA 1981, 1982 & 1983 2013 edition (no exceptions allowed); and approved by NIOSH 42CFR Part 84 for Chemical, radiological & Nuclear (CBRN) protection. MFG: _____ Model #: _____ Delivery: _____ days after receipt of order	\$	\$
2	21	Self-Contained Breathing Apparatus to include: 4500 psi. / 45 - minute spare bottles. MFG: _____ Model #: _____ Delivery: _____ days after receipt of order	\$	\$
3	14	Self-Contained Breathing Apparatus to include: Spare Face pieces and Voice Amplifier. MFG: _____ Model #: _____ Delivery: _____ days after receipt of order	\$	\$

I. Approvals/Compliance:

1. Apparatus 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 30-, 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 prior to production or shipment to end user.
2. Units Shall be equipped with integrated PASS device must meet requirements of NFPA 1982, 2013 edition prior to production or shipment to end user.
3. Units equipped with emergency egress system shall also comply with NFPA 1983 Standard on Fire Service Life Safety Rope and System Components, 2012 Edition; Type: Escape.
4. Units equipped with accountability system must meet minimum requirements for FCC part 15 and part 90.

II. Equipment Warranty:

1. Bidder shall provide written warranty on all equipment contained within this bid package.
2. Written warranty shall explicitly detail and cover all parts, labor, travel, and shipping for a specified amount of time no less than 36 months.
3. The bidder's warranty policy shall be included as part of the bid package and shall be a factor in the decision making.
4. The bidder shall be the fully authorized service center for all items contained on the bid.
 - a. The fully authorized service center shall be capable of handling all warranty and service claims.
 - b. The bidder shall include proof they are a fully authorized dealer and service center for all tools included in the bid.
 - c. The bidder shall commit to providing a response to all service calls within a 24-hour period.
 - d. The bidder shall commit to providing loaner items at no cost for out-of-service time periods during the warranty period.
 - e. The bidder shall commit to providing loaner items at no cost for extended off-site service periods during the warranty period.
 - f. The bidder shall commit to providing a 24-month warranty extension beyond the first 36 months for any item exceeding three service calls during the first 36 months.
5. The bidder shall provide a "manufacturer lifetime warranty" covering all defects in material and workmanship beyond normal wear and tear. The bidder shall provide warranty specifications, inclusions, and exceptions as part of bid package.

III. Specific Requirements:**Facepiece**

1. Facepiece shall have removable inhalation check valve to prevent exhaled air from entering and contaminating regulator (demand valve).
2. Facepiece shall have open port to provide minuscule breathing resistance when regulator is not attached.
3. Facepiece shall provide means to display to user with visual indicators for Heads-up-display.
4. Facepiece shall have icon for Heads-up display system status indicators.
5. Facepiece shall have regulator attachment that does not bear any weight on lens.
6. Facepiece shall have effective field of view of 86% and overlapping field of view of 122% without attached component.
7. Facepiece shall be available in three sizes, constructed of rubber (small, medium, large).
8. Facepiece shall have nose-cup comprised of silicone rubber, or similar material and available in three sizes (small, medium, large).
9. Facepiece shall have three head harness options constructed of flame/heat resistant assembly: Kevlar, or similar material Head Harness (4-pt. adjustable), Kevlar, or similar material 5-pt. adjustable and rubber 5-pt. Adjustable.
10. 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.
11. Lens shall be hard-coated on outside and anti-fog coated on inside.
12. Facepiece shall have removable speaking diaphragm with aluminum-coated membrane, suitably protected and located on facepiece for optimal voice projection.
13. Facepiece shall have exhalation valve that is to be serviceable without special tools.
14. Facepiece shall be capable of water submersion for cleaning and disinfection.

Mask-Mounted Regulator (Demand Valve): Push or Twist-to-Connect

1. When doffing regulator, regulator disengagement shall simultaneously stop air flow and release regulator.
2. Regulator shall be equipped with variable flow bypass.
3. Regulator shall not have exposed wiring in order to prevent snags and increase product durability.
4. Regulator shall have two cover options:
 - a. hard cover.
 - b. purge cover.
5. Regulator shall have two options for air-supply hose:
 - a. Continuous hose from pressure reducer to regulator.
 - b. Quick-connect hose that terminates on shoulder in front of user.
6. Regulator must be equipped with a positive protection membrane that covers the diaphragm, preventing permeation of CBRN agents.

Heads-Up Display (HUD)

1. Heads-Up Display (HUD) System shall be integrated within regulator, eliminating snag hazards and increase product durability.
2. Heads-up-display shall be powered from central power system.
3. Heads-up-display System shall eliminate cross-talk among firefighters.
4. Heads-up-display System shall be immune to radio frequency interference (RFI) and must function properly in close proximity to fire service hand-held radios.
5. Heads-up-display System shall separate pressure indicators from status indicators:
 - a. status indicators.
 - b. pressure indicators.
6. Heads-up-display system shall provide user with remaining cylinder air volume, available in four increments through series of four colored LEDs:
 - a. Four green lights 76 to 100%-cylinder volume
 - b. Three green lights 51 to 75%-cylinder volume
 - c. Two flashing amber lights 36 to 50%-cylinder volume
 - d. One flashing red light 0 to 35%-cylinder volume
7. Heads-up-display status indicators shall be icon-based and display battery life warning, PASS alarms, EVACUATE indicator, and secondary alarm indicator.
8. Heads-up-display shall incorporate photoelectric sensor that senses ambient light conditions, automatically adjusting display to one of multiple pre-programmed light intensities.
9. Buddy lights shall be visible from outside of firefighter's facepiece.
10. Heads-up-display system shall allow user to select from four modes of operation:
 - a. Continuous pressure mode that shall always have pressure LEDs on.
 - b. Intermittent pressure mode that shall turn on first three increments when reached for 20 seconds.
 - c. Oscillating pressure mode that shall brighten and dim LEDs every 20 seconds.
 - d. Mixed pressure mode that shall turn on first two increments when reached for 20 seconds and last two increments are in continuous mode.
11. Heads-up-display shall be field-removable and replaceable without use of special tools.

Universal Air Connection (UAC)

1. System shall be capable of:
 - a. Refill within immediately dangerous to life or health (IDLH) atmospheres.
 - b. Transfilling between two SCBA wearers (connection allows for donation and receipt of air), providing emergency breathing system (EBS) while maintaining NIOSH approvals.
 - c. Quickly refilling (approximately one-minute duration) SCBA cylinder from mobile compressor, cascade system or RIT pack.
 - d. Extending wearer's air supply over longer duration when remote cascade system or other compressed gas source is located within remote area.
2. Primary UAC shall be illuminated when supply pressure reaches Low Pressure Warning Alarm or can be configured to optional medium pressure warning alarm.
3. SCBA shall have secondary options for UAC to be mounted on user's waist.

Pressure Reducer (First-Stage Regulator) with Primary Low-Pressure Warning Device

1. Pressure reducer shall incorporate downstream valve to ensure fail-safe design when in open position.
2. Pressure reducer shall incorporate bell alarm mechanism.
3. An alarm mechanism shall be an air-actuated, continuously ringing audible warning alarm, automatically operating when supply cylinder air pressure reaches approximately 35% of rated service life.
4. An alarm mechanism shall cover multiple levels of frequencies to cover all hearing levels.
5. An alarm mechanism shall be user-accessible while wearing SCBA.
6. Pressure reducer reduces cylinder pressure to outlet pressure not to exceed 115 psi; outlet pressure must be adjustable.
7. Pressure reducer shall have flow capacity of 700 liters per minute at full pressure.
8. Pressure reducer shall have two options for cylinder connection type: threaded or quick-connect.
9. Quick-connect connection shall not be removable from cylinder while under pressure.
10. Pressure reducer shall have two options for cylinder connection location: remote connection or direct connection.
11. Pressure reducer shall be capable of converting from threaded to quick-connect or vice versa.
12. 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.
13. Pressure reducer shall be sealed system that does not allow moisture to enter valve components.
14. Pressure reducer shall not require special tools for disassembly.
15. Pressure reducer shall have two accessory ports, one medium pressure and one high pressure.

Cylinders

1. Cylinders with 4500 psi operating pressure must be available in 45-minute durations.
2. Cylinders must be available in 4500 psi operating pressure.
3. 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.
4. 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.
5. Cylinder valve shall be available in two options:
 - a. remote connection
 - b. direction connection
6. 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.
7. Cylinder valve shall incorporate CGA thread that can be converted to quick connect cylinder without special tools.
8. Cylinder shall have bracket and boot that can be user-installed and provide positioning and added security of cylinder to backplate.

PASS Device

1. PASS device shall contain power, control and battery modules.
2. Power module shall provide power to all electronic SCBA components from battery module and act as central power system.
3. Power module shall act as central command center, distributing all information and data among electronic components.
4. PASS device shall be designed for battery level check and removal of batteries while SCBA remains in jump seat.
5. Power module shall be capable of illuminating UAC fitting when supply cylinder reaches 35% of rated service time.
6. Control module shall have analog and digital display for added redundancy. Analog gauge must be positioned above digital display as viewed by user.
7. Control module shall be equipped with full color graphical display. Display shall be re-programmable and capable of future integrations. Display's background color coordinates with Heads-up-display pressure status.
8. Control module shall automatically provide information to user when placed in upright position. Device can be manually activated by pressuring reset button.
9. PASS device shall use single line to connect power and control module.
10. Control module shall have two reset buttons that perform same function no matter which button is pressed.
11. Control module shall have alarm button to activate full alarm and is to be illuminated.
12. 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.
13. PASS device shall have colored buddy lights:
 - a. green (pressure above 50% and no alarms)
 - b. yellow (pressure between 36 and 50%)
 - c. red (below 36% or alarms are active).
14. Power module shall be equipped with dual sound emitters; sound emitters shall perform at minimum 100 dB in room temperature.
15. 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.
16. PASS device shall be capable of storing periodic logs. Periodic logs must indicate cylinder pressure for each SCBA pressurization stored at 15-second intervals.
17. PASS device's event and periodic logs shall provide ability to download to personal computer for maintenance records or for use in incident investigations.
18. PASS device shall be immune to radio frequency interference (RFI) and must function properly in close proximity of fire service hand-held radios.
19. 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 minutes. Calculations can be made to zero pressure, low pressure alarm or medium pressure alarm.
20. PASS device shall employ gasket perimeter seal to provide highest protection level against water ingress, while providing ability to upgrade or repair electronics.

21. PASS device shall be capable of electronically storing user's name into memory via ID tag.
22. PASS device shall be removable with no more than two screws.
23. Control module shall have service mode that provides ability to see number of hours used, connect to PC and firmware versions.
24. Control module shall incorporate rubber boot for added protection and is to be replaceable.
25. Power and Control Modules shall have optional RFID chip for asset and maintenance tracking.

Speaker Module

1. Speaker module shall provide amplified speech that removes inhalation breath noise.
2. Speaker module shall provide at minimum, 70 dB output.
3. Speaker module shall be capable of passing NFPA heat and immersion leakage test (not NFPA-required).
4. Speaker module shall easily be attached and removed without special tools.
5. Speaker module shall have light to indicate that device is powered on.
6. Speaker module shall have on/off button to allow user to manually power off as needed.

Emergency Escape Breathing Support System

1. As option, emergency escape breathing support system must be accommodated by SCBA.
2. System must be available with common SCBA quick-disconnect fitting.
3. System shall connect to intermediate pressure side of SCBA, downstream of pressure reducer.
4. System shall have both male and female connections.

Carrier and Harness

1. Shoulder harness shall have separate left and right pads for easier and less costly replacement.
2. Shoulder harness shall have retro-reflective markings for better visibility within low light conditions.
3. Shoulder harness shall have localized frictions pads on shoulders to prevent slippage.
4. Shoulder harness shall be available in standard and serviceable tunnel.
5. Shoulder harness shall have improved color stability up to 600 degrees Fahrenheit.
6. Shoulder harness shall have optional chest strap.
7. Harness design shall have Kevlar, or similar material webbing.
8. 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.
9. Shoulder harness shall differentiate pad inside from pad outside by color; pad inside is grey and outside is black.
10. Waist pad shall be available with a minimum of three options:
 - a. Basic – basic pad with straps attaching directly to backplate.

- b. Fixed swiveling – standard pad attached to metal bracket that swivels in center and automatically centers.
 - d. Adjustable swiveling – standard pad attached to metal bracket that has three positions and automatically centers.
11. Adjustable swiveling waist pad shall be one-handed operation and can be performed while on user's back.
 12. Backplate shall be capable of accepting all three waist pad designs.
 13. Backplate shall have two side handles and one top handle that are accessible with gloved hand.
 14. Backplate side handles shall be capable of 500 lbs. of force.
 15. Backplate top handle shall be capable of 1000 lbs. of force.
 16. Backplate cylinder band shall be available in two types: metal or fabric.
 17. Waist pad shall be of rigid construction to allow for easy donning and support.
 18. Waist straps shall be double-pull forward design.
 19. Harness design shall have regulator keeper for storage that can be attached to waist strap or chest strap.
 20. Regulator keeper shall allow regulator to be connected at any angle.

Weight

1. Weight of facepiece (without regulator, with communications) shall not exceed 3 lbs.