# Spectrum Pressure Demand Respirator with Escape Bottle (SPECPDE) Bid Specifications

<table>
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<tr>
<th><strong>Respirator Type</strong></th>
<th>Combination self contained breathing apparatus (SCBA) and pressure demand supplied air respirator (SAR)</th>
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</table>
| **Components**      | • Full Facepiece  
• First and Second Stage Regulator Assembly  
• Harness Assembly Including 5 or 10 minute Cylinder  
• Air Supply Hose |
| **Approvals**       | • Code of Federal Regulations (42 CFR 84) Type C, combination SCBA and Type C class respirator  
• ANSI Z87.1-2003; impact, penetration and optical requirements for the lens |
| **Facepiece**       | • Available in two sizes  
• Include translucent silicone rubber nose cup  
• Replaceable polycarbonate, hard coated lens  
• Optically corrected for prism imbalance and power  
• Single, centered speaking diaphragm  
• Accept a front-mounted quick disconnect pressure demand regulator  
• Equipped with a spring-loaded exhalation valve that maintains positive pressure from 0.9-1.4 inches water in the facepiece.  
• Easily adjusted head harness constructed of neoprene with a five-strap attachment.  
• Head harness includes five quick release nylon buckles.  
• Double flange  
• No special tools need for assembly and maintenance  
• Single platform design |
| **First Stage Regulator** | • Provide a continuous outlet pressure supply of 90-125psi  
• Include an airline hose with check valve to prevent back flow of cylinder air through supply hose while emergency cylinder is activated, and to prevent intake of contaminated air if supply hose is disconnected. |
| **Second Stage Regulator** | • Maintain a positive pressure in the facepiece  
• Provide a flow of 300 liters per minute on demand  
• Equipped with two release buttons on opposite sides for detachment  
• First-breath activated  
• Include a bypass knob on the side of the regulator to override the first breath feature and turn on the flow of air into the facepiece if needed  
• Includes a manual override button on the regulator to override the first breath feature if needed  
• Airflow shutoff button on the side of the regulator for use during donning and doffing procedures |
| **Harness**         | • Made of 2” wide flame retardant nylon webbing  
• Nomex covered, foam shoulder comfort pad  
• Velcro loops to hold the regulator hose in place during use  
• Quick release, corrosion resistant plastic buckles  
• Include a flame retardant cylinder holster to support the escape air cylinder on the wearer's hip |
| **Cylinder**        | • Constructed of aluminum  
• Offer 5 or 10 minute rated durations  
• Required 5 year hydro test  
• Have a valve with the standard CGA threaded outlet of 346 for low pressure fittings  
• Include a gauge to view cylinder pressure  
• Designed with pressure ratings of 2216 psi (5 minute) and 3000 psi (10 minute) to allow filling with low pressure rated compressor  
• Includes a top-mounted hand wheel for on/off operation |
Airline Supply Hose
- Made of neoprene reinforced rubber 3/8" or 1/2" I.D. hose
- Manufactured specifically to carry breathing air
- Offers 8, 1/4" approved quick disconnect couplers compatible with breathing tube fittings
- Approved for use with 300 foot of hose

Optional Voice Amplifier
- Threads onto facepiece after speaking diaphragm is removed
- Operates on one 9-volt battery
- Is intrinsically safe

Warranty
- 6 year limited manufacturer warranty on first and second stage regulator assemblies and breathing air cylinders. All other parts have a 1 year limited manufacturer warranty.