

Respiratory Protection Guidance for Breathing Air Hose

The only breathing air supply hose that should be used for a supplied air respirator is the one specified on the NIOSH approval label from the original manufacturer of the respirator. No substitutions allowed. Below is the documentation:

OSHA Regulations:

29 CFR 1910.134 is the OSHA standard for respiratory protection. Please see the link below:

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=12716

The excerpts below show that all parts must be from the manufacturer and must be NIOSH approved.

1910.134(d)(1)(ii) The employer shall select a NIOSH-certified respirator. The respirator shall be used in compliance with the conditions of its certification.

1910.134(h)(4)(i) Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator;

NIOSH Certification and Manufacturer Instruction Manuals:

The instruction manual for each Bullard respirator has the NIOSH approval label showing all the components (from "hose to nose") that have been approved by NIOSH. Bullard respiratory protection manuals can be downloaded at the following link:

http://www.bullard.com/V3/resources/downloads/respiratory_dwnlds.php

- Breathing Air Hoses are specifically listed on these approval charts.
- Use of a hose that is not on the chart will void the NIOSH approval.
- Everything gets tested as a system to ensure the safety of the worker.
- If any part of the system is changed, neither NIOSH nor Bullard, can guarantee the protection since there isn't any test data with substituted components.
- NIOSH tests the hoses for pressure, flow, kink resistance, and chemical permeation.
- Substitute hoses may not provide enough flow, may burst, may kink and cut off flow, or allow chemicals to permeate into the breathing air.
- Any of these situations could cause severe harm, or even death to the worker.

NIOSH Respirator Users Notice on Spare and Replacement Parts:

<http://www.cdc.gov/niosh/npptl/usernotices/pdfs/UsersNotice05042007.pdf>

In this document it is clear that hoses are part of the approved assembly and substitutions void NIOSH approval. Excerpts are shown below:

"...A respirator that includes any replacement or spare part that has not been inspected as part of the respirator manufacturer's quality control plan is in a configuration not evaluated by NIOSH and therefore is not NIOSH approved. Please consult the respirator manufacturer before purchasing and installing replacement or spare parts to ensure the NIOSH approved configuration is maintained. Respirators which have been modified by the interchanging of subassemblies or other deviations using parts not produced and distributed under the respirator manufacturer's controlled system no longer meet the definition of being approved as a NIOSH certified respirator, and the use of the NIOSH approval label is not authorized for that unit...."

"... In some cases even minor modifications to respirators may make significant changes in the performance of the respirator, even if the proposed replacement components or subassemblies (such as self contained breathing apparatus (SCBA) air cylinders or air supply hoses) meet the same component-specific industry safety and performance standards as those included in the NIOSH approval...."

"...The regulation permits NIOSH to only approve complete respirator assemblies and prohibits the approval of respirator subassemblies such as SCBA air cylinders or supplied air respirator (SAR) air supply hoses. These requirements are intended to insure that one respirator manufacturer has overall control and responsibility for the integrity of the approved respirator. The respirator manufacturer has the responsibility to ensure that its replacement parts are "designed and constructed to ...maintain the effectiveness of the respirator." 42 CFR 84.62(b)..."

Americas:

E.D. Bullard Company

1898 Safety Way
Cynthiana, KY 41031-9303
Toll free: 877-BULLARD (285-5273)
Tel: 859-234-6616
Fax: 859-234-8987
www.bullard.com

Europe:

Bullard GmbH

Lilienthalstrasse 12
53424 Remagen • Germany
Tel: +49-2642 999980
Fax: +49-2642 9999829
www.bullardextrem.com

Asia-Pacific:

Bullard Asia Pacific Pte. Ltd.

LHK Building
701, Sims Drive, #04-03
Singapore 387383
Tel: +65-6745-0556
Fax: +65-6745-5176
www.bullard.com

