



A Division of Bacou USA Safety, Inc.

T E C H N I C A L B U L L E T I N

#33 January 20, 1987

SCBA EXCESSIVE HEAT

On December 15, 1983 NIOSH issued a Respirator User Notice titled "Effects of Heat and Flame on Rubber and Plastic parts of Self Contained Breathing Apparatus." This notice (see attached) emphasized that some of the plastic components of SCBA's are being damaged as a result of exposure to excessive heat and flame. NIOSH and SURVIVAIR are concerned that fireman are staying longer in fire and encountering higher heat conditions because of improved protection of heat resistant materials in turn out gear.

SURVIVAIR issued an update notice May 28, 1986 (Technical Bulletin #30) suggesting that departments or individuals consider changing the plastic rims used on the SCBA facepiece to stainless steel retaining rim kit (P/N 941640). Since that notice was issued in May, SURVIVAIR has received a small number of reports that the plastic rim may also develop cracks due to aging, exposure, abuse, etc.

*******WARNING*******

SURVIVAIR requires that a periodic inspection of the facepiece be performed. This inspection should be done monthly, as well as both before and after use and cleaning of the SCBA. The visual inspection should include all inspection areas covered in the instruction manual. All plastic component, including rims, should be inspected for cracks or deformation due to aging, exposure, abuse, etc. **ANY DAMAGED COMPONENT MUST BE REPLACED BEFORE USE OF THE FACEPIECE.** Failure to do so could lead to component failure and subsequently possible loss of respiratory protection.

Replacement of any damaged rim will require the stainless steel retaining rim kit (P/N 941640). SURVIVAIR also urges all users to upgrade their plastic rims to the stainless steel rims. The upgrade kit is available from SURVIVAIR at the same price as the plastic rims.

Please contact SURVIVAIR Technical Services or a SURVIVAIR authorized Warranty Service Center for further assistance.



December 16, 1983

Centers for Disease Control
National Institute for Occupational
Safety and Health - ALOSH
944 Chestnut Ridge Road
Morgantown, WV 26505

RESPIRATOR USER'S NOTICE

Effects of Heat and Flames on Rubber and Plastic
Parts of Self-contained Breathing Apparatus

The National Institute for Occupational Safety and Health (NIOSH) has received several reports of damage to parts of self-contained breathing apparatus that have apparently been exposed to excessive heat and/or flames during fire fighting activities. A preliminary investigation of these reports indicates that development of new turnout gear for fire fighters permits them to enter and remain in higher temperatures and flame exposures. These higher temperatures and flame exposures can apparently damage some presently-used rubber and plastic parts of self-contained breathing apparatus.

NIOSH is proposing to include requirements for high-temperature performance of self-contained breathing apparatus in Title 30, Code of Federal Regulations, Part 11 (30 CFR 11), the regulations governing approval of respirators. NIOSH has been advised by self-contained breathing apparatus manufacturers that they are developing new materials with greater resistance to heat and flames. NIOSH recommends that fire fighters avoid overexposure of breathing apparatus parts to high heat and/or flames, where possible.

NIOSH requests that fire fighting personnel and others report further incidents of heat and flame damage of self-contained breathing apparatus. Such reports should be sent to the Testing and Certification Branch, Division of Safety Research, NIOSH, 944 Chestnut Ridge Road, Morgantown, WV 26505-2888.

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