



LETTER TO ALL INTERESTED PARTIES

Subject: Evaluation and Acceptance of Emergency Breathing Support Systems (EBSS) Incorporated into SCBA Approvals

NIOSH is revising its policy on the use of Emergency Breathing Support Systems (EBSS), also known as “Buddy Breathers”. This policy change is being made coincident with the addition of requirements related to the use and operation of these devices in the NFPA 1981, 2013 edition. This policy change will be applicable only to SCBAs meeting the requirements of NFPA 1981, 2013, or subsequent editions. NIOSH will recognize NFPA 1981, 2013-compliant EBSS systems as a part of the NIOSH SCBA approval for users who have received the appropriate level of training. Users will be able to identify approvals for SCBA which incorporate the required hardware by the explicit listing of an additional EBSS statement to the standard cautions and limitations on the approval label. The statement will signify the EBSS components have been evaluated by NIOSH and accepted as meeting the requirements for EBSS under the requirements of NFPA 1981, Revision 2013.

Based upon a review of submissions made to the NIOSH Docket 147 (<http://www.cdc.gov/niosh/docket/archive/docket147.html>), as well as the applicable OSHA standards, NIOSH is modifying the existing “Buddy Breather” policy to further support and encourage best practices in the fire service for the deployment of EBSS. Accessories available on some manufacturers’ products enable users to have the option to provide buddy breathing; however, effective training programs are not in place across the nation. It has been reported that departments are reluctant to document success stories; however, anecdotal evidence submitted to the docket indicates that lives have been saved when Buddy Breathers have been used.

Recognition of these practices and use of EBSS conforming to the newly developed NFPA 1981:2013 standard provides a framework for the Fire Service to formally incorporate best practices in the fire service for the maintenance and use of EBSS and development of “Buddy Breathing” training programs conforming to National Fire Protection Association Standards 1404, *Fire Service Respiratory Protection Training* and 1500, *Fire Department Occupational Safety and Health Program*, which will further address cautions and limitations associated with the use of EBSS in future editions. Until such time that the personnel training requirements of NFPA 1404 and the Occupational Safety and Health Program requirements of NFPA 1500 are revised to address EBSS maintenance and use, NIOSH will require the manufacturer User Instructions to provide training information.

Those making application for approval are advised of the following minimum requirements.

Additional standards:

In order to be evaluated for incorporation into SCBA approval, EBSS systems must be incorporated into SCBA configurations found to be conforming to NFPA 1981:2013, by a certification organization accredited for personal protective equipment in accordance with ISO/IEC Guide 65, *General requirements for bodies operating product certification systems*, currently Safety Equipment Institute (SEI).

Additional testing:

All components of the EBSS must be able to operate at the specified low temperature limit without adversely affecting the operation of the SCBA, as determined by testing conducted in accordance with the current revision of Standard Test Procedure TEB-CBRN-ASR-STP-0219.

At the minimum activation pressure with the EBSS receiver line held open to atmosphere, the donor unit must be able to meet Pressure-Demand performance requirements through the remainder of the air supply as determined by testing in accordance with the current revision of Standard Testing Procedure TEB-CBRN-ASR-STP-0220.

Starting from a full cylinder and prior to the minimum End-of-Service-Time-Indicator (EOSTI) activation pressure the EBSS donor/receiver line will be opened to atmosphere and held open. The duration for which the host unit performance meets Pressure-Demand performance requirements as determined by testing in accordance with the current revision of Standard Testing Procedure TEB-CBRN-ASR-STP-0220, will be measured and recorded.

Additional cautions and limitations:

The approval label must include these additional cautions and limitations:

EBSS Activation or engagement of EBSS in either the donor or receiver mode changes the SCBA use to Escape-Only, approved service time for either the donor, or the receiver is no longer applicable. Additional critical cautions and limitations apply. Refer to section EBSS in the users' manual.

At a minimum, these additional caution and limitation statements must appear in section EBSS.

X EBSS may not be engaged or activated in donor mode after the donor End-of-Service-Time-Indicator (EOSTI) has activated^a.

^a Consistent with the requirements of NFPA 1981:2013, EOSTI settings of less than 33% of service pressure will not be permitted; however, higher minimum EBSS activation pressures will be considered contingent upon acceptable notification to the user.

- X Users must be fully trained in the operation of EBSS in accordance with a training program conforming to the requirements of NFPA Standards 1404, Fire Service Respiratory Protection Training and 1500, Fire Department Occupational Safety and Health Program.
- X Simultaneous connection of more than two users, one donor, and one receiver, is not permitted.

General application information:

All certification application(s) shall 1) be submitted concurrently to NIOSH (Records Room) and SEI and 2) include a completed application package for each SCBA respirator model for which approval is requested. NIOSH submittals must conform to the requirements outlined in the Standard Application Procedures (SAP). Standard SCBA approval fees are applicable to each new approval sought. Consultations with NIOSH are available and encouraged prior to submitting an application to enable an accurate determination of required test hardware to be made. Your effort in following these procedures will assist NIOSH and SEI in ensuring an orderly certification process.

We hope this information is helpful to you. Please feel free to contact Robert Stein at 412-386-6889 or by email at rstein@cdc.gov if you have any questions.

Sincerely yours,

Jonathan Szalajda
Acting Chief, Technical Evaluation Branch
National Personal Protective Technology Laboratory

Cc: Mr. Steve Sanders, SEI