

Dragon, Karen E. (CDC/NIOSH/EID)

From: Gary Bloomquist [gbloomquist@snet.net]
Sent: Friday, January 21, 2011 11:07 AM
To: NIOSH Docket Office (CDC); NIOSH Docket Office (CDC)
Subject: 147 - Reevaluation of the NIOSH policy on emergency escape support breathing system or buddy-breather device used with open-circuit self-contained breathing apparatus

Please see attached,

Thank you,
Gary Bloomquist

NIOSH Request for Comments
Buddy Breathing (Emergency Breathing Safety System)

www.cdc.gov/niosh/docket/review/docket147/default.html

Comments will be accepted until 5:00 p.m. EDT on January 30, 2011

NIOSH Web Page Format

To submit comments, please use one of these options:

Send NIOSH comments using this [online form](#)

Send comments by [email](#).

Fax comments to the NIOSH Docket Office: 513-533-8285

Send by Mail to:
NIOSH Mailstop: C-34
Robert A. Taft Lab.
4676 Columbia Parkway
Cincinnati, Ohio 45226

Contact Person for Technical Information

Jonathan Szalajda, 412-386-6627, or email zfx1@cdc.gov

Please fill in your contact information below, or leave blank to submit comments anonymously.

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Please provide comments or suggestions that you feel would improve the document.

January 21, 2011

I support NIOSH testing and approval for Emergency Breathing Support Systems (EBSS), aka, "Buddy Breathing", to be included on Self Contained Breathing Apparatus.

My background includes thirty years combined volunteer and career firefighting, as well as twenty six years involvement in firefighting equipment.

EBSS has been available as an "un-approved" option for over twenty five years. While not all fire departments select this option, an overwhelming majority do.

With this said, I feel it becomes imperative that this popular option be properly function tested to ensure its use does not decompensate the primary performance of SCBA.

As you are aware, there are significant differences in breathing rate performance between NIOSH and NFPA. NIOSH uses a 40 liter per minute (lpm) volume rate, 100 lpm peak flows, in calculating cylinder volume duration. This means, at a 40 lpm rate, a 30 minute cylinder must last a minimum of 30 minutes.

NFPA uses a 2.5 times greater breathing rate, 120 lpm, with 300 lpm peak flows. This stricter breathing rate is consistent with a firefighter performing fire attack, search and rescue, and other common strenuous firefighting activities found at a fire ground. Performance criteria for both tests indicate positive pressure must be maintained inside the face piece at all times during the testing.

The relevance of this breathing rate information should be directly correlated into the performance testing of EBSS.

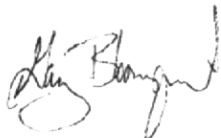
If a trapped firefighter is out of air, and located by another firefighter who implements EBSS, the initiation of EBSS should not compromise the performance of the donor's SCBA.

This seemingly would indicate testing should include breathing performance while two users are simultaneously breathing from a single air source (cylinder and regulator(s)).

Further consideration should also be given to criteria and testing of alternative air support systems, commonly referred to as "RIT PAKS".

In summary, if these optional air supply components are commonly being used in the fire service, it is best for all involved, that performance criteria be established and test methods conducted to ensure the proper use of the equipment provides the intended benefit, without compromising the safety, of a well intention air donor. I also support that the individual fire departments continue have the choice as to whether they choose to have this option installed.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gary Bloomquist". The signature is written in a cursive style with a large, looped initial "G".

Gary Bloomquist