

## Dragon, Karen E.

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**From:** Brookman, Mike [mike.brookman@interspiro-us.com]  
**Sent:** Thursday, July 03, 2003 2:15 PM  
**To:** 'NIOCINDOCKET@CDC.GOV'  
**Subject:** Comments regarding CBRN Escape standard from June 25 brief

Sirs:

Comments on the CBRN Escape standard:

Regarding 5.1 (and further to Rich Stein's comments at the June 25 meeting) the HIGH category escape device should have a higher LRPL than the 2000 required by GENERAL or SPECIFIC and that higher level could be obtained by requiring that each HIGH rated escape device be tested in a positive pressure mode, using whenever practical, the escape device's own source of air. An escape device designed to function most effectively with reliable positive pressure in the hood or mask, is hobbled by a test that relies on effective seals in a negative pressure mode. Why not require a PF of 3000 and test as the device is intended? That way compromising test modifications won't hide potential design flaws and the device "as delivered" is the real test subject with a legitimately derived PF. The escape standard three classes of approval differentiates APR from SCBA on the basis of design, but not by performance (PF) or test method (LRPL). The problem is not test methodology as the same lab has tested whole SCBAs in positive pressure mode. Moving to positive pressure LRPL testing now, for devices that provide positive pressure in the mask or hood as part of the PF strategy, provides a rationale that's consistent with conventional wisdom. When the CBRN PAPR standard is developed that same conventional wisdom will assume a higher PF for PAPR than APR. The escape standard should be consistent within the whole range of CBRN respirators.

Regarding 4.5 Flammability The Burner tip temp should be 800 degrees, not 80.

Also regarding 4.5: Testing an oxygen donating device, whether chemically generated or compressed oxygen, with that contributory flow of oxygen through seams and ports gives an overly generous impression of that device's safety in real life. The Flammability test is not and should not be construed as a material test, it is a respirator test, and respirator should be flowing air/oxygen during the test to verify no contribution to flammability as a result of normal operation. This may be seen as design restrictive but the larger issue is whether an oxygen donating device may be safely used in a flammable environment.

Regards,

Mike Brookman  
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