

**Miller, Diane M.**

---

**From:** Brookman, Mike  
**Sent:** Thursday, November 07, 2002 10:58 AM  
**To:** 'NIOCINDOCKET@CDC.GOV'  
**Cc:** Swofford, Mike  
**Subject:** APR Comment: Lack of selection and use guidance

Regarding proposed NIOSH standards for CBRN Escape and CBRN APR devices:

We are very concerned about the dearth of information and guidance for the user community regarding selection and use of this equipment. The full face CBRN APR is intended for use by the first responder community, but industry specific guidance (NFPA 1981) clearly advises against the use of APRs or escape devices, as stated in Section A.1.1.1 of the 2002 Edition of NFPA 1981: "The use of SCBA by fire fighters is always assumed to be in atmospheres immediately dangerous to life and health (IDLH). There is no way to predetermine hazardous conditions, concentrations of toxic materials, or percentages of oxygen in air in a fire environment, during overhaul (salvage) operations, or under emergency conditions involving spills or releases of hazardous materials. Thus, SCBA are required at all times during any fire fighting, hazardous materials, or overhaul operations. General use criteria are contained in NFPA 1500, Standard on Fire Department Occupational Safety and Health Program"

We recognize NIOSH's steadfast argument that APR and PAPR are not to be used in IDLH environments, but we think NIOSH needs to go further, in the manner above, to state that unknown threat conditions warrant the highest level of respiratory protection (i.e. SCBA) until the threat is better defined as non-IDLH. Without that statement NFPA 1981 guidance in A.1.1.1 is in clear contradiction with the intended use of these CBRN APR and Escape respirators by first responders. Without some clear, unambiguous direction to the user community, disseminated prior to the release of any approved product, we can reasonably expect misuse and misapplication of CBRN APR and CBRN Escape devices in the first responder community.

Our perspective on this should be considered unique and credible. As the manufacturer of the only SCBA to be marked as CBRN Approved, we have seen widespread misinformation and confusion regarding appropriate selection and use. Absent guidance from NIOSH, OSHA, NFPA, IAFC or IAFF, the fire community is trying to feel its way on the whole issue of CBRN SCBA implementation. Some want all firefighters to be equipped with CBRN SCBA, some consider CBRN only relevant when used in conjunction with a Level A suit, others argue that using a Level A suit obviates the need for CBRN SCBA. The CBRN SCBA standard is approaching its first anniversary with no guidance to the user community on circumstances for proper use. Where is that guidance?

What's most troubling is that all of this confusion regarding CBRN SCBA is within a community of committed SCBA users. Contrast the present situation on SCBAs within the fire/rescue community with the release of CBRN APRs into a broader first responder community (Police/EMS) with little prior respirator experience. The absence of specific guidance on the selection, care, and use of CBRN respirators of all types will create widespread confusion and misallocation of resources as responding departments purchase limited use escape devices instead of a more appropriate APR, PAPR or SCBA. More than the waste of resources, however, is the greater risk to personnel as responders extend the use of CBRN escape devices into IDLH environments

as entry devices. Without clear guidance on the full range of protection available (CBRN and non-CBRN) escape, APR, PAPR, SCBA devices and specific direction on appropriate use, the opportunity for misinformation and misuse may outweigh the benefits of a new class of CBRN Approved respirators.

This guidance could be a simple color coded guide that covers a matrix of threats (HOT (IDLH), WARM, COOL) and modes (ENTRY, ON-STATION, ESCAPE) that indicates the appropriate respirator for all personnel in each block in the matrix. All ENTRY blocks would require an SCBA, ON STATION would range from SCBA (HOT), PAPR (WARM) and APR (COOL), and ESCAPE would mirror the three categories shown in the escape device standard. Manufacturers would then be required to label appropriately for the threat and mode, in order to avoid inappropriate use.

Fire service magazines are already advertising escape devices intended for counter-terror response, but without clearly stating that the devices are for escape and not entry. A simple, mandatory label on both the product and any promotional material, would reinforce the proper selection and use, and stem much of the risk.

Regards,

Michael Brookman  
President  
Interspiro, Inc.