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**From:** Erwin, Daniel [Daniel.Erwin@med.va.gov]  
**Sent:** Tuesday, July 29, 2003 4:16 PM  
**To:** 'NIOCINDOCKET@CDC.GOV'  
**Subject:** Comments on June 30, 2003 Draft Concept for CBRN Escape Respirator Standard

As a federal government industrial hygienist with duties that include dealing with personal protective clothing and equipment issues relating to CBRN WMD hospital decontamination teams including respiratory protection, I write to provide several comments regarding the current effort to identify requirements for consideration in the CBRN Escape Respirator Concept Development. Specifically, regarding the June 30, 2003 draft "Concept for CBRN Escape Respirator Standard,"

(1) With respect to the "Specific" and "General" categories identified in Part 1, it would seem plausible to consider the scenario whereby delivery and/or dispersal of a CBRN agent causes, or occurs concurrently with a fire. Therefore my suggestion would be to give manufacturer's the option of certifying a "Specific" or "General" category CBRN escape-only device as also providing protection from hazardous air contaminants typically associated with a building fire (e.g., smoke and other particulates - which could be handled by using a prefilter to maximize the service life of the P100 filter), along with protection from carbon monoxide and other typical low molecular weight gas or vapor phase combustion products associated with burning combustibles and synthetics, and for which the Federal Aviation Administration (FAA) some time ago established certification standards for airline "smoke hoods" used by uniformed flight crew members. I'm inferring that use in a fire is the intent of this proposed standard, both from the requirement for performance against carbon monoxide, and from the flammability and heat resistance requirement in Section 6(h).

2) My second suggestion has to do with the wording for Section 11 (Cautions and Limitations). First, I'm not sure why #6 only mentions radiological and nuclear dust particles, when the escape device also provides protection from bioaerosols and certain chemical agents. Specifically, why doesn't #6 instead read something to the effect:

6. This respirator provides limited respiratory protection against inhalation against certain gas and vapor chemical agents, and biological, radiological and nuclear dust particles. This respirator provides limited dermal (skin) protection to the head area and eyes.

I also suggest adding language that reinforces the fact that unless a CBRN escape hood has also been specifically been approved for escape from a fire situation that it should not be used for that purpose. For example, "This device [is or is not, as appropriate] approved for escape from a fire situation, which may contain particulates (smoke) and toxic gases such as carbon monoxide."

I hope these comments are useful to NIOSH's efforts to develop design and certification requirements for realistic escape scenarios for civilian victims of a domestic terrorist attack. If you have any questions, please feel free to contact me at: 508-583-4500 x2991.

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