Miller, Diane M. (CDC/NIOSH/EID)

From: Meghan.Swanson@MSAnet.com
Sent: Friday, January 30, 2009 12:52 PM
To: NIOSH Docket Office (CDC)
Subject: 008-A - Powered Air-Purifying Respirator (PAPR) Discussion Topics
Attachments: MSA docket comments 1-30-09.pdf

Attached are MSA comments to the docket 008-A.

Regards,
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Re: 008-A - Powered Air-Purifying Respirator (PAPR) Discussion Topics

MSA has the following comments on the December 21, 2007 proposed concept for powered air-purifying respirators:

4.1.9 Low pressure indicator
We reiterate our previous comment (similar to many manufacturers') that the low power and low pressure indicators are not necessary for industrial devices used in non-IDLH environments, and result in PAPR over-design for some markets. We would also like to note that a low flow indicator should be an acceptable alternative to a low pressure indicator, and should be specified in the standard as such.

4.1.10.3 Low power warning
An active low power warning will be difficult to execute under the current constraints of 15 minutes and extreme temperatures while using current technology and battery costs. This requirement will cause premature alarming under normal conditions using current battery technology.

4.2.7.3. Cartridge service life requirement reduction to accommodate multi-gas cartridges
We recognize that the current gas approval system, wherein approvals designate a different capacity for a given challenge agent depending on whether it is part of a single or multi-gas cartridge approval, is confusing to the user and should be simplified. One acceptable method for improving the system is requiring the same gas capacity regardless of the other approvals on the cartridge, as has been proposed in Table 3. However, instead of adopting the more stringent single gas service times as proposed (for example, 50 minutes for ammonia), we recommend adopting the shorter multi-gas service times across the board (for example, 25 minutes for ammonia). The reason for this recommendation is to allow current multi-gas cartridges to continue to be used in the workplace. In our experience, end-users often prefer multi-gas cartridges because of simplified inventory and deployment. In this scenario, the manufacturer of an ammonia-only cartridge, for example, would be free to advertise the improved capacity compared to the multi-gas cartridge or competitors. If NIOSH does not reduce the service times in Table 3, multi-gas cartridges will either be regulated out of the standard, or will become much bigger and bulkier than current products.

4.2.4 Breathing rate verification

We agree with the oral comments at the Dec. 2 meeting that a limited excursion to negative pressure in the breathing zone does not necessarily imply less protection for the user. NIOSH needs to conduct additional benchmarking tests in order to determine an allowable integrated pressure excursion. The allowable excursion should not be zero simply because this is the "easiest" criteria to measure in the lab. A more meaningful requirement should be developed in order to allow existing PAPR technologies to be used, as a stated goal of the standard development.

Additionally, please see MSA's opinions on the following topics, discussed at the December 2, 2008 public meeting:

Opinions on the consideration of an alternate approach to gas and vapor testing.

We do not recommend use of this approach by NIOSH for cartridge or canister certification. We prefer NIOSH to run gas tests at the actual flow rates of interest instead of extrapolating the data.

Opinions on the establishment of positive pressure PAPR ESLI for organic vapors and acid gases.

We do not think that ESLI should be required for OV and AG PAPR cartridges. There are significant technology and market barriers to requiring ESLI on filters for such a wide range of agents.

Regards,

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