

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

From:
Sent: Monday, July 28, 2008 7:22 PM
To: NIOSH Docket Office (CDC)
Subject: Comments on NIOSH Docket # 139
Attachments: NIOSH Docket 139 -

The attached Microsoft Word file contains my comments to NIOSH Docket # 139, concerning "The Potential Modification of the NIOSH Statement of Standard for a Chemical, Biological, Radiological, and Nuclear (CBRN) Full Facepiece Air-Purifying Respirator (APR)."

Thanks,

**COMMENTS ON
NIOSH Docket Number 139
The Potential Modification of the NIOSH Statement of Standard for a Chemical,
Biological, Radiological, and Nuclear (CBRN) Full Facepiece Air-Purifying Respirator
(APR)**

28 July 2008

- Ref: (a) NIOSH Statement of Standard for Chemical, Biological, Radiological, and Nuclear (CBRN) Full Facepiece Air Purifying Respirator (APR) updated 30 Jan 2004
(b) DoDI 6055.1, DoD Safety and Occupational Health Program
(c) U.S. Department of Defense Joint Requirements Oversight Council, "Capability Production Document for the Joint Services General Purpose Mask (JSGPM)" 04 October 2005
(d) InterAgency Board Position on NIOSH Docket #139 regarding Department of Defense (DoD) Request for an Additional Configuration to the Standard 40mm Thread Connection

This correspondence provides rationale in support of modifying the CBRN APR Statement of Standard (reference (a)) to allow the bayonet mounted canisters of the Joint Services General Purpose Mask (JSGPM) as an alternative approved design for Department of Defense (DoD) applications.

Background:

The JSGPM is the next generation of military gas mask and was developed as a joint effort by all branches of the Armed Services. One of the key objectives since the inception of the JSGPM program was development of a mask that would attain NIOSH approval. The JSGPM had been in development five years before promulgation of CBRN APR Statement of Standard in March of 2003. However, due to the bayonet design of the canisters the possibility of NIOSH approval for the JSGPM became unattainable because the CBRN APR Statement of Standard allowed only gas masks with 40 mm NATO threaded canisters to be candidates for CBRN respirator approval.

The JSGPM was designed to modernize military CBRN defense during warfare. Military gas mask design has evolved into the innovative JSGPM design, which greatly improves warfighter protection and is compatible with modern weapon systems. The JSGPM was designed with dual bayonet canisters because the previous design no longer served U.S. Armed Forces warfighting needs. In other words, the 40 mm NATO threaded canister design of existing military gas masks, which is now required by NIOSH to pass CBRN certification, is not compatible with evolving U.S. warfighting strategy. The JSGPM dual bayonet mounted canister design was necessary to achieve military objectives, such as enhanced protection against CBRN agents and toxic industrial chemicals, and incorporates many improvements over current military respirators, including a lower breathing resistance, reduced weight and bulk, visor ballistics

protection, improved field of view, greater comfort, and to ensure compatible use with existing airfield, shipboard, and battlefield equipment. The JSGPM dual bayonet mounted canister design also decreases and balances the weight of the mask and provides the warfighter with the ability to change out cartridges on a contaminated battlefield - a task that cannot be accomplished with NIOSH CBRN approved respirators with 40 mm NATO threaded canisters. The JSGPM with its bayonet mounted canisters will replace all existing military gas masks.

Except for its bayonet mount canister configuration rather than the international standard screw mount that NIOSH uses, the JSGPM will pass all NIOSH CBRN testing criteria including breathing resistance requirements. The JSGPM CBRN canister passed NIOSH Capacity 1 CBRN testing on 6 March 2006.

Discussion:

There are two distinct populations that will wear the JSGPM. These include military warfighters and DoD Installation CBRN first responders comprised of DoD civilian, military, and contractor personnel. Although military warfighters are not obligated to comply with Occupational Safety and Health Administration (OSHA) regulations when performing military-unique operations (defined in reference (b)), they chose to include the requirement for NIOSH approval in military doctrine (reference (c)). Lack of NIOSH approval will not preclude use of the JSGPM during military-unique operations.

In contrast to military warfighters, DoD civilian, military, and contract installation CBRN first responders must comply with OSHA regulations, including being enrolled in a comprehensive respiratory protection program, which requires wearing only NIOSH approved respirators (reference (b)). There are over 73,000 DoD installation CBRN first responders throughout the Armed Services. NIOSH approval will allow DoD civilian, military, and contract installation first responders to wear the JSGPM as protection during consequence management and installation protection in the aftermath of a CBRN terrorist incident. NIOSH approval of the JSGPM will also ensure that DoD Installation CBRN first responder respirator canisters will be interoperable with the respirator canisters worn by outside military warfighting units deployed to assist DoD installations in the aftermath of CBRN terrorist attacks.

As described previously, the JSGPM does not meet the canister interchangeability requirements of the CBRN APR Statement of Standard. However, canister interchangeability is not an issue in the protection of DoD personnel. DoD operates an independent military supply system to address issue and replacement of canisters for the JSGPM. Requests for replacement canisters from an outside source would not arise during non-military unique first responder operations. Use of one respirator for DoD installation first responders and for military warfighters is essential to establish canister interoperability within DoD.

Also, one of the first actions that will occur on DoD installations under terrorist attack will be to increase security by halting admittance to the base. The greatest amount, and very possibly the only assistance DoD installations will receive in the aftermath of a CBRN terrorist attack will be from outside military warfighting units deployed to assist DoD installations. Military units deployed to perform national defense contingency actions at DoD installations will wear the new JSGPM military gas mask. **Therefore, NIOSH approval of the JSGPM is critical for DoD**

civilian, military, and contract installation first responders to be interoperable with the military units deployed to assist the installation in the aftermath of a CBRN terrorist attack.

In reference (d), the InterAgency Board (IAB) stated that *“Interoperability should exist in the civilian and military worlds, especially if military assets and resources are to seamlessly integrate into civilian operations and provide support during a domestic incident.”* This statement is good in theory; however, it is not reality. Military units deployed to perform national defense contingency actions in civilian communities will wear the new JSGPM military gas mask, which is not interoperable with civilian first responder community NIOSH CBRN approved gas masks with 40 mm threads.

The IAB (reference (d)), also expressed concern that use of respirators with the JSGPM bayonet design would be extended to the civilian first responder community and that responder communities could not afford to immediately replace their current masks. This is not the case! As indicated in NIOSH Docket # 139, DoD is requesting that NIOSH accept the JSGPM bayonet mounted canisters as an alternate permissible design for **DoD applications only**.

The IAB provided NIOSH with potential options to allow the JSGPM bayonet mask design to proceed forward. Specifically, IAB Option # 5 stated *“Grant a waiver for the bayonet lug configuration or incorporate an option that applies only to DoD response elements.”* This is all that DoD is requesting of NIOSH.

Perception is another reason for modifying the CBRN APR Statement of Standard to allow JSGPM bayonet mounted canisters for DoD applications. Civilian DoD first responders often times work side-by-side with their military counterparts. In the past, when these two groups have worked together in the presence of a CBRN threat, DoD civilians have worn their NIOSH approved respirator while military personnel wear military issue gas masks. Even though both devices may be similar in performance and quality, this situation has created the perception that one mask is superior to the other. Since this perception may give rise to ill feelings within the military workforce, NIOSH CBRN approval of the JSGPM will eliminate this situation by DoD issuing one respirator to both DoD civilian and military personnel for protection during CBRN terrorist attack against DoD installations.