

## **SUMMARY OF CHANGES TO DRAFT IHFOM CHAPTER 9, RESPIRATORY PROTECTION**

The major amendments to Chapter 9 are listed in the following bullets:

\* Additional requirements of the chemical, biological, radiological, nuclear (CBRN) Respirator Program are addressed under appropriate sections of this Chapter, including discussions on the following issues:

- Special considerations for fit testing CBRN respirators.
- Distinguishing between tight and loose fitting CBRN approved powered air purifying respirators (PAPRs), including hooded units. Discussion includes the logic behind the Navy requirement for wearing tight-fitting full face PAPRs instead of loose-fitting CBRN PAPRs.
- Logic behind Navy policy for respirator canister change-out schedules for CBRN respirators.

\* An expanded explanation of respirator selection considerations.

\* Calculations to estimate the atmospheric oxygen concentration if the contaminant concentration is known.

\* Guidance on performing annual Respiratory Protection Program Manager (RPPM) audits and periodic BUMED respirator program evaluations including a checklist for respiratory protection program audits.

\* A discussion on and inclusion of a reference explaining how certain contaminants may exist as a vapor at one concentration; but at another concentration they may exist as both vapor and particulate.

\* A discussion on full face respirator lens eye protection testing requirements to meet the high impact level, optical, and markings requirements of ANSI Z87.1-2003.

\* Assigned Protection Factors (APFs) based on the Occupational Safety and Health Administration APF Final Rule of 24 August 2006.

\* Calculation to determine the respirator maximum use concentration for multi-component mixtures.

\* A discussion on shore-based and shipboard military respirator medical evaluation policy.

\* Guidance for selecting between a 95% efficient filter versus a 100% efficient filter.

\* A discussion on respiratory protection against Pandemic Influenza, including a weblink to *NAVENVIRHLTHCEN NAVY POCKET GUIDE FOR HEALTH CARE PROVIDERS - PANDEMIC INFLUENZA PROTECTION PROCEDURES*.

\* A discussion on nanoparticles and air-purifying respirators recommended by NIOSH to be used for protection against inhalation of nanoparticles.

\* A discussion concerning hooded self contained breathing apparatus (SCBA).

\* Additional guidance for wearing contact lenses with respiratory protection.

\* Additional guidance for escape only respirator policy.

\* Additional guidance for SCBA maintenance.

\* Introduction to two new quantitative fit test apparatus, including a newly designed controlled negative pressure device and also a new condensation nuclei counting apparatus capable of fit testing both elastomeric and filtering facepiece respirators.

\* A caution that contaminated airline hoses can allow permeated chemicals to evaporate inside the hose and then be inhaled by the respirator wearer.

\* Conditions that nullify NIOSH respirator approval.

\* Shipboard requirements for carbon monoxide monitor and alarm systems during SCBA air cylinder charging operations.