

**Standards Development Efforts
for Powered Air Purifying Respirators and Closed-Circuit Breathing Apparatus Used to Protect
Emergency Responders
against Chemical, Biological, Radiological and Nuclear Agents**

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ABSTRACT

The National Institute for Occupational Safety and Health (NIOSH), along with the U.S. Army Soldier Biological and Chemical Command (SBCCOM), and the National Institute for Standards and Technology (NIST) are continuing their efforts to develop appropriate standards and test procedures for all classes of respirators that will provide respiratory protection from Chemical, Biological, Radiological, and Nuclear (CBRN) agent inhalation hazards.

NIOSH approval under this program will signify that a respirator is expected to provide needed protection to first responders in situations where an act of terror has released harmful chemicals, pathogens, or radioactive materials into the air. Approvals will be based on positive results from rigorous tests on sample units submitted to NIOSH by manufacturers, and from stringent evaluation of manufacturers' quality-control practices, technical specifications, and other documentation

In particular, standards development efforts have been initiated for the development of CBRN standards for Powered Air Purifying Respirators (PAPR), as well as Closed-Circuit Breathing Apparatus (CCBA). This presentation reports on the development of CBRN concept standards for these two classes of respirators.