



Why consider the CBRN Standard?

Q:

What is the difference between CBRNE and CBRN?

A:

CBRNE refers to a Chemical, Biological, Radiological, Nuclear, or High Yield Explosive situation or incident. CBRN is defined as weaponized or non-weaponized chemical, biological, radiological, and nuclear materials that can cause significant harm. CBRN approved equipment is specifically designed to protect first responders and first receivers who may be exposed to a CBRNE event.

Why should the NIOSH CBRN Standard matter to me?

The NIOSH CBRN Standard for Powered Air Purifying Respirators was created to address the “ongoing concern of potential terrorist events and the need to provide the emergency responder and receiver communities with alternatives to respiratory protection as quickly as possible” (NIOSH CBRN PAPR Announcement Letter, October 6, 2006). This Standard addresses the special needs and consideration of respirators that protect responders and receivers in the event they are called to duty in a Chemical, Biological, Radiological or Nuclear event.

My grant does not require me to buy CBRN approved Powered Air Purifying Respirators (PAPRs), why should I?

Personal Protection is not about grants or funding requirements, but about personal protection and worker safety. The NIOSH CBRN Standard ensures the highest level of worker and employer confidence, giving the responder and/or receiver the highest level of performance and protection as indicated in the NIOSH CBRN approval.

Are there other examples of where Standards exceed the basic NIOSH approval in this manner?

Yes. An example of this would be in the Fire Service. A standard NIOSH approved SCBA used in the industrial setting would not survive a basic structure fire operation and the rigors of fire service use. Therefore, fire departments utilize the NFPA 1981 in addition to base NIOSH approval to ensure their respirators can function in the environments they will face under normal fire department operations. There is also a NIOSH CBRN Standard for SCBA that provides confidence that such SCBA utilized in structural firefighting can also survive the rigors of a Chemical, Biological and Radiological Nuclear operation.

This is very similar to PAPRs. The base NIOSH approval is expanded upon with the CBRN standard to ensure PAPRs can withstand the rigors of a Chemical, Biological, Radiological and Nuclear operation.



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I hear a lot about capacity ratings of NIOSH CBRN approved PAPRs. What does that mean and why does it matter?

A:

Capacity ratings reflect the approved service life of a filter cartridge based on NIOSH test requirements for specific gas/vapor challenges. A capacity rating of Cap1 indicates a NIOSH approved service life for the filter cartridge of 15 minutes when exposed to the gas/vapor challenge and breakthrough criteria indicated in the Standard. A Cap2 rating indicates a 30 minute service life when tested to the same criteria.

This means that a Cap 2 approved PAPR system offers twice the gas/vapor operational capability and half of the operational costs of Cap 1 approved systems. Certain design features and performance characteristics that go into a Cap 2 approval may boost user confidence and operational capability during an event.

If a retrofit kit is available for my old PAPR system, should I consider it?

While a retrofit kit may meet the minimum requirements of the NIOSH CBRN Standard, newer technology and capabilities are available with today's modern CBRN PAPR designs.

Take the time to evaluate what is now available to you and your workers. You may find that for a nominal investment you not only receive new equipment, but newer technology that significantly increases your level of comfort and protection.

**CBRN Approved Equipment—
Your Life Depends On It**



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