

Notifying NIOSH of SCBA Failure or Reduced Performance as a Standard Procedure

Highlights:

- Prompt reporting of self-contained breathing apparatus (SCBA) failures or performance issues helps the National Institute for Occupational Safety and Health (NIOSH) identify problems early and prevent similar risks from affecting other firefighters or future equipment.
- Consider reporting when an SCBA no longer meets the requirements of 42 CFR Part 84. This includes SCBA or component failures, near failures, or significant performance degradation during normal use.
- A clear standard operating procedure (SOP) on reporting issues helps ensure the necessary information is captured and communicated.
- Early and consistent reporting supports faster investigations, effective corrective actions, and safer SCBAs for the fire service nationwide.



Photo by NIOSH

Background

NIOSH is the federal agency responsible for evaluating and approving respirators used in U.S. workplace settings, including the SCBA worn by firefighters.

To help protect the safety and health of firefighters, NIOSH also investigates SCBA in the field that have failed, are demonstrating reduced performance, or no longer meet required standards. These investigations, known as **Nonconforming Respirator Investigations** (NRIs), help ensure that active SCBA remain reliable, approved, and safe for use in emergency operations.

The NIOSH Fire Fighter Fatality Investigation Prevention Program's (FFFIPP) primary goal is to prevent firefighter serious injuries and fatalities. NRIs are a critical tool for accomplishing that mission.



U.S. Centers for Disease
Control and Prevention
National Institute for
Occupational Safety and Health



Photo by NIOSH

The NRI Process

The NRI process begins when a fire department or a NIOSH approval holder, such as a respirator manufacturer, reports an issue to NIOSH. After confirming that the reported respirator does not meet federal requirements, NIOSH initiates an official NRI.

Approval holders are expected to:

- Investigate and determine the root cause for the nonconformance.
- Determine how widespread the problem may be, including part numbers, approval numbers, lot numbers, and manufacturing dates.
- Implement appropriate corrective actions to address the issue.
- Submit a complete report detailing the findings of their investigation, which includes providing evidence of remediation and all applicable testing results.
- If necessary, issue a recall or user notice. A draft of either is typically provided to NIOSH for review prior to dissemination and an official copy is sent to NIOSH for record and to make available on their website.

Depending on the results of the investigation, an NRI may lead to actions such as user notices, stoppage of sales, recalls, or retrofits. In serious cases, the results could lead to rescission or revocation of the NIOSH Approval.

How Departments Can Help

NFPA 1850 establishes the fire service's responsibilities for the selection, care, use, inspection, maintenance, and retirement of SCBA. Section 14.3 of the Standard requires fire departments to have a respiratory protection program in place that includes processes to identify problems, remove unsafe equipment from service, document issues, and take corrective action when SCBA do not perform as intended.

This includes SCBA or component failures, near-failures, or significant performance degradation due to normal use.

As part of the respiratory protection program, adopt a clear SOP on reporting SCBA issues to ensure necessary information is captured and communicated.

Steps to Include in an SOP

- Work closely with the department chain of command to identify potential SCBA issues and appropriate next steps.
- Immediately remove the complete affected SCBA assembly from service, including the cylinder and facepiece.
- Secure the SCBA to prevent use.
- Preserve equipment logs, as outlined in NFPA 1400, to understand use and maintenance prior to the adverse condition.
- Document the chain of custody.
- Provide prompt, written notification to the manufacturer describing the issue, circumstances, and specific conditions or cause. Other important information may include data logs and photographic or video evidence of the specific condition.
- Provide copies of the notification to NIOSH (PPEConcerns@cdc.gov) as well as the organization that certified the SCBA such as the Safety Equipment Institute (SEI).

Within the SOP, it is beneficial to describe the specific process for providing written notification to the manufacturer, NIOSH, and any additional certification organizations.