



NIOSH Reference: TN-13245

Centers for Disease Control  
and Prevention (CDC)  
National Institute for Occupational  
Safety and Health  
National Personal Protective  
Technology Laboratory  
P.O. Box 18070  
Pittsburgh, PA 15236-0070

Phone: 412-386-4000  
Fax: 412-386-4051  
June 7, 2004

Mr. Patrick Morrison  
International Association of Fire Fighters  
1750 New York Avenue, NW  
Washington, DC 20006

Dear Mr. Morrison:

The National Institute for Occupational Safety and Health (NIOSH) has received a letter from Mr. Richard Sabacinski of Scott Health & Safety dated May 26, 2004. This letter contains their response to a report that the cylinder valves of three self-contained breathing apparatus allowed air to leak through, pressurizing the units and activating their low-air alarms and personal alert safety systems (PASS).

The PASS device is activated by air pressure when the cylinder valve is opened. Scott reported that in some cases, the activation pressure of the PASS device can be very low. Scott found that over a period of many hours or days, a closed cylinder valve with even a very small leak rate (too small to have an appreciable effect on the respirator's duration), can cause the pressure in the respirator to build up to the PASS activation pressure. The original report from Mr. Andrew Levinson indicated that in addition to the PASS devices, the low-air alarms of the respirators would activate; however, Scott has stated that their investigation determined that the end user was not experiencing such occurrences.

Scott has concluded that the reported cases of PASS activation do not represent a nonconformance with the requirements of Title 42, *Code of Federal Regulations*, Part 84. Based on a review of the available information, NIOSH concurs with this assessment. The investigation under task number TN-13245 will therefore be considered closed. Scott has indicated that they will continue to work with end users to resolve instances of undesired PASS activation. Thank you for reporting your concerns to NIOSH. If you have any questions or require additional information, please contact me at 412-386-4029.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Vance Kochenderfer".

Vance Kochenderfer  
Quality Assurance Specialist  
Respirator Branch  
National Personal Protective Technology Laboratory

cc: J. Kravitz, MSHA  
S. Sanders, Safety Equipment Institute