



SAFETY EQUIPMENT INSTITUTE

1307 Dolley Madison Blvd., Suite 3A
McLean, VA 22101

June 25, 2004

Mr. Andrew Levinson
International Association of Fire Fighters
1750 New York Avenue, N.W.
Washington, D.C. 20006-5395

Dear Mr. Levinson:

This letter is in follow-up to our correspondence of February 9, 2004 regarding your report to NIOSH of leaking cylinder valves on Scott AirPak *Fifty* SCBA.

On February 5, 2004, SEI received a letter from Mr. Vance Kochenderfer of NIOSH regarding reports of leaking cylinder valves on Scott AirPak *Fifty* SCBA. As we understand it, problems were reported by fire fighters in Middletown, CT, where leaks with cylinder valves caused integrated PASS to inadvertently activate. Based on your report, SEI contacted Scott, which immediately initiated SEI's investigation into the report of leaking cylinder valves.

Scott conducted its investigation and responded with the issuance of a letter report. Additionally, Scott representatives traveled to SEI's Office in McLean, VA to explain and discuss the results of their investigation and subsequent proposed corrective action(s).

As you are aware, Scott's integrated Pak-Alert PASS device is automatically activated using air pressure from the SCBA when the SCBA's cylinder valve is opened. In its letter report, Scott indicated that the air pressure required to activate the respective integrated PASS device is very low. This low air activation pressure is accentuated when the spring which controls the activation pressure of the PASS device switch is at the low end of its specified operating range. Scott noted that certain SCBA's (i.e., tightly built SCBA with a spring at the very low end of its operational range) which have not been utilized for a period of time (many hours or days), may have a small amount of leakage from the cylinder valve build up to the point where the PASS device's very low activation pressure point is triggered and the PASS device is inadvertently activated.

Scott also reported that a variety of conditions and circumstances can affect the amount of leakage through the seat of a valve. These conditions include, but are not limited to, wear, how tight a valve is closed, temperature changes and pressure differential.

Scott stated that 100% of its cylinder valves are "leak tested" on a proprietary piece of test equipment which can detect leaks at very low levels. Cylinder valves which are found to be noncompliant are not used.

As a result of its investigation, Scott has implemented into production, a corrective action which "tightens" the operating range specification for the spring used to control the activation pressure of the PASS device switch.

Given the variety of conditions and circumstances, Scott has indicated that they plan to work individually with users to resolve any PASS device issues and/or concerns in the field. Scott has also stated as users are identified where there is a need for replacement of the activation spring, Scott will arrange for the necessary replacement. Scott is not planning the issuance of any User Notice/Safety Bulletin or Recall Action at this time.

After 1) meeting with Scott's representatives, 2) conducting a review of Scott's Letter Report, and 3) corresponding with NIOSH, SEI is in agreement with Scott's course of action.

As a part of its investigation, SEI plans to monitor Scott's activity with regard to leaking cylinder valves and inadvertent PASS device activation. SEI has requested that Scott provide SEI with quarterly status reports outlining any activity by Scott in these areas.

SEI's investigation into your report to NIOSH of leaking cylinder valves on Scott AirPak *Fifty* SCBA is ongoing, and we will continue to provide you with updates as significant developments occur.

SEI appreciates your reporting of this problem to NIOSH, and subsequently to SEI. If you have any questions or require additional information, please feel free to contact me.

Sincerely,



Stephen R. Sanders
Technical Director

cc: Mr. Richard Sabacinski, Scott
Ms. Beverly Gullede, Scott
Mr. Vance Kochenderfer, NIOSH
Mr. Kevin Warren, SEI Auditor