



Is It Safe To Use Extractors for Alternative Purposes?

April 2016

Volume 1, Issue 1

A question was posed to us recently regarding appropriate use of washer-extractor machines, specifically whether washing personal items (such as dish towels, linens, uniforms, etc.) in an extractor is an acceptable practice.

NFPA 1851, Chapter 7, Section 7.3.7 states as follows:

*(9) *Where the machine is also used to wash items other than ensemble elements, it shall be rinsed out by running the machine without a laundry load through a complete cycle with detergent and filled to the maximum level with water at a temperature of 49°C to 52°C (120°F to 125°F).*

A.7.3.7(9) When possible, organizations should provide a washing machine(s) for the sole purpose of cleaning protective ensemble elements.

To clarify the issue further, we consulted with some of the experts involved in both setting the standards and writing them. The overriding recommendation we heard loud and clear is that extractors should be used only for the purpose for which they were intended. ***“Washer/extractors which primary intent is to clean personal protective equipment should NOT be used to also clean station linens, towels, uniforms, etc.”*** says Tim Tomlinson of Gear Cleaning Solutions, L.L.C. ***“This is the safest approach and will provide the best guarantee to prevent cross contamination of contaminants and carcinogens found in turnout gear.”***

According to Tomlinson, the intent of the standard, as it was written, was to allow some flexibility for departments that don't have the luxury of a budget which can accommodate the purchase of washer/extractors for the individual purposes of each situation. That is why this recommendation was included in NFPA 1851, and why it is also recommended in A.7.3.7(9) that organizations should provide a washing machine(s) specifically for the purpose of washing ensembles whenever possible.

Confounding the issue is the fact that many extractors are highly programmable, which is useful in allowing fire departments to wash various types of PPE, but could also lead to improper use.

Says Jeffrey Stull of International Personnel Protection, Inc., ***“It is my recommendation that the fire service not use their washer/extractor machines for both turnout clothing and personal items. The use of these machines for personal items could contribute to unintentional transfer of contaminants to items such as personal clothing, linens, and stationwear that pose an unnecessary additional hazard to firefighters.”***

Sources at the CDC that led the NIOSH Firefighter Cancer Study concur that **practices of comingling contaminated gear with personal items such as bedding and towels are not preferred under ANY circumstance.**

Bottom line: Although tempting in terms of convenience, use of washer-extractor machines to wash personal items has NOT been proven to be safe, is a practice that experts urge strongly AGAINST and, in fact, may serve to undermine the very purpose for which extractors were designed in the first place.

We thank the CDC, Gear Cleaning Solutions, L.L.C., and International Personnel Protection, Inc., for their valuable contributions to this article.

C3FAC bulletins are intended as a tool to promote awareness about various topics relating to cancer prevention in the fire service. If you have a question you would like addressed, a subject you would like covered, or an article you would like to submit for a future bulletin, please write to: firefighters@c3fac.org.

Note: C3FAC bulletins are not intended to alter or replace industry standards, nor to replace guidance from a qualified expert. If you have a specific situation that needs to be addressed, please seek advice from the appropriate authority or expert.