



HEPA Vacuum Cleaners Play Critical Role in EPA's Lead RRP

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More than 80 million homes in the United States contain traces of lead, a deadly element that if exposed to even in small amounts can cause serious effects on the brain, nervous, reproduction, cardiovascular, muscular, skeletal, renal, and blood systems. Lead is often absorbed through contaminated dust in older buildings and through paint chips easily ingested by small children, putting them at high risk for lead poisoning. In 2008, in order to curb the occurrence of lead-related diseases, the EPA issued 40 CR, Part 745, Subpart E, also known as the Lead RRP.

In effect since April 22, 2010, the new rule requires contractors who perform renovations, repair or painting projects on homes or schools built before 1978- the year lead paint was banned- to be trained and become "EPA Lead-Safe Certified" in order to prevent lead contamination. As a result, the RRP has sparked a fury amongst contractors to hurry up and fulfill the new requirements, or pay a hefty fine. Fortunately, there are more than 240 EPA-accredited training providers across the country offering the hands-on course that educates contractors on the now required work practices to minimize harmful lead dust during these construction projects.

Among the work practices is the use of a HEPA filter vacuum cleaner to safely collect and contain lead particulate in and around the work area. The use of a HEPA vacuum seems easy enough, but it is a point that has actually sparked some confusion amongst contractors since the EPA does not certify or recommend any HEPA vacuum cleaners. Instead, the agency defines the equipment as follows:

"HEPA vacuum means a vacuum cleaner which has been designed with a high efficiency particulate air (HEPA) filter as the last filtration stage. A HEPA filter is a filter that is capable of capturing particles of 0.3 microns with 99.97% efficiency. The vacuum cleaner must

be designed so that all the air drawn into the machine is expelled through the HEPA filter with none of the air leaking past it."



So while HEPA vacuums cannot be certified by the EPA, contractors can ensure their vacuum meets the requirements by confirming with the manufacturer that the HEPA filter has been tested and certified by a private testing company to capture 99.97% of microns, down to and including 0.3 microns. While many contractors already own inexpensive shop-style vacuums, the EPA discourages the use of these types of machines when retrofitted with a HEPA filter in place of the original basic filter.

In addition to the filter, the EPA requires the vacuum to be equipped with a floor nozzle that includes a carpet beater bar. This tool, when used to vacuum carpet, will agitate the fibers to remove heavy lead dust that may be embedded in the carpet. Carpet beater bar floor tools are often offered in 2 versions; an air-driven tool, which uses the working air of the vacuum to spin the beater bar and an electric version powered by the vacuum (power source must be available on vacuum). Naturally the electric beater bar is more expensive than its air-operated counterpart, but both versions are extremely effective.

Once contractors invest in a properly-equipped HEPA vacuum cleaner, it will become a valuable tool that makes their renovation projects safer and more efficient. The EPA recommends they be used to: clean walls from the ceiling down, along with remaining surfaces like furniture and fixtures; vacuum fine lead dust off of workers before they leave the work area; and to collect dust at the source of sanding and grinding with vacuum-assisted power tools.

While the Lead RRP requires contractors to invest in both equipment and training, the cost not to comply can result in fines upwards of \$32,000 per violation, per day; not to mention potential private lawsuits brought on by homeowners. Indeed, initial costs will be a heavy burden for some, but considering the deadly effects of lead poisoning, it's a small price to pay.

For more information on the EPA's Lead RRP, visit www.epa.gov/lead/pubs/renovation.htm.

About Nilfisk CFM

Nilfisk CFM, the industrial vacuum division of Nilfisk-Advance America, helps its industrial customers meet their individual cleaning requirements and challenges with an extensive range of high-performance vacuum cleaners.

From its Malvern, Pa, headquarters, Nilfisk CFM provides industrial vacuums for heavy-duty applications that require maximum suction power, and specialty vacuums for clean applications that demand "absolute" air purity and facility cleanliness. The company's vacuums are equipped with industry-specific features and exceptionally efficient filtration systems, ensuring dust- and debris-free facilities in the food, chemical/ pharmaceutical, electronics, metalworking/ powder coating, and a variety of manufacturing industries.

For more information, visit www.nilfiskcfm.com

Nilfisk HEPA Vacuums for the Lead RRP

Nilfisk HEPA vacuum cleaners exceed the EPA's definition of a HEPA vacuum and are equipped to safely collect hazardous lead dust generated during renovations.

- Equipped with multi-stage filtration, including a tested and certified HEPA filter, Nilfisk HEPA vacuums safely capture 99.97% of debris, down to and including 0.3 microns.
- Nilfisk HEPA vacuums for lead abatement can be equipped with optional turbo and/ or power nozzles. These are carpet cleaning tools equipped with a rotating beater bar that connect to the vacuum's hose. The turbo nozzle uses the working air of the vacuum to spin the beater bar, while the power nozzle's beater bar is driven by electricity. Both are extremely effective in agitating the carpet to collect heavy lead debris which may have settled in the fibers.
- Nilfisk HEPA vacuums can be used in conjunction with vacuum-assisted power tools to collect hazardous lead debris at the source.

For more information about Nilfisk HEPA vacuums for the Lead RRP, visit www.nilfiskcfm.com.