

A BREATH OF FRESH AIR

by Lee Earl, Indoor Air Quality Specialist

Scientific research says we spend 90 percent of our time indoors. In the last several years, a growing body of evidence indicates that the air within our homes and businesses can be more seriously polluted than the outdoor air even in the largest and most industrialized cities. Some of the worst indoor pollutants are bacteria, tobacco smoke, pet hair and mold.

AFTERDISASTER® provides complete restoration services, including the air you breathe in your home and office. We now offer Heating, Ventilation and Air Conditioning (HVAC) decontamination and remediation through our Indoor Air Quality Division. Often throughout the industry you will hear this generalized as “duct cleaning” though this does not address all of the aspects involved in proper HVAC remediation. According to the National Air Duct Cleaners Association (NADCA), recognized as the premier standard-setting organization in the field of HVAC System cleaning, air duct cleaning implies that only the ductwork will be cleaned. However, NADCA further states that in order to obtain the most effective results, it is recommended that all portions of a HVAC System be cleaned. When fire, smoke, and water damage occurs it is recommended that the resulting contamination within the HVAC System be removed for the wellbeing of all building occupants.

NADCA has developed standards for quality HVAC System cleaning. Even though this standard allows flexibility in the choice of method used to clean a particular HVAC System, it maintains that certain criteria are upheld. This criteria consists of, but is not limited to:

- Source Removal
- Agitation
- Removal and Capture of debris

Source Removal

First, it is necessary to eliminate the source of pollution or reduce emissions.

Agitation

Agitation is the mechanical action that dislodges the particulate debris from the interior face of the ductwork. This can be achieved in a variety of ways, but is usually achieved with manual or cable driven brushes, cable driven whips, compressed air or pneumatic hoses with directional blasts of air.

Removal and Capture of Debris

The removal of debris from the HVAC System can be achieved in a number of ways, but the most common way is with the use of a vacuum unit. This vacuum unit is attached to the HVAC System and creates an internal negative pressure. The debris is then entrained into the airflow by the second principle, agitation. When these negative pressure vacuums are operated within the building envelope it must have the ability to filter the exhaust air at a level of 99.97% collection efficiency for 0.3 micron size particles. This level of filtration is most commonly referred to as HEPA filtration.

Is the Air You Breathe Making You Sick? If you answer *yes* to any of the following questions, it may be time to have your air duct system professionally cleaned.

- Does anyone in the house have allergies, asthma, or other respiratory problems?
- Does anyone in your family suffer from headaches, nasal congestion, or other sinus problems at night or in the morning?
- Is there a smoker in the house?
- Do you have cats, dogs or other pets?
- Do you notice “musty” or “stale” odors when the furnace or air conditioner runs?
- Do you notice dust on your furniture shortly after cleaning?
- Does it seem there is not enough airflow coming from your vents?
- Is your furnace equipped only with a standard throw-away fiberglass filter?
- Have you suffered a fire, smoke or water damage?