

ROI of Improved Indoor Air Quality

Don't wait to think about the quality of your building's indoor air until employees or tenants begin complaining of itchy eyes and dry throats. Instead, take preventative measures to maintain a healthy Indoor Air Quality (IAQ). IAQ is a component of Indoor Environmental Quality (IEQ), that measures additional aspects of the indoor setting including temperature, lighting, ventilation, and noise.

IAQ encompasses many aspects of air quality including the size and concentration of dust particles in the air, mold, allergens, pathogens, fumes from Volatile Organic Compounds (VOCs), and the incursion of outdoor air pollution. Making small changes in your cleaning and maintenance plan is one of the least expensive and most flexible ways to ensure that your building's IAQ is not detrimental to the health and productivity of its occupants.

The products and methods chosen to clean a building affect the building's IAQ. Products with high levels of certain chemicals can release VOCs into the air. VOCs are a major factor in the formation of ground level ozone -- a highly reactive gas that, according to the Environmental Protection Agency, "affects the normal function of the lungs in many healthy humans." Using products that are water-based rather than solvent-based will reduce VOC emissions and the possibility of chemical sensitivity reactions in your building occupants. Green Seal, a non-profit organization that strives to achieve a healthier and cleaner environment has a certification system that identifies environmentally preferable products, including cleaning products. Green Seal certified products generally have limited or no impact on IAQ and occupant health.

Methods of cleaning can also affect IAQ for the better or worse. Approaches that cause the least dispersal of chemicals into the air are generally better for IAQ. One of these approaches is to simply pour or spray chemicals into a rag rather than spraying them directly onto surfaces to significantly reduce the chemical matter that is released into the air. Other ways to reduce VOC concentration in the air include assuring that there is maximum ventilation and circulation in the area being cleaned and timing cleaning so that the least amount of people are in the area as possible.

Another area that should be examined for improvements is the equipment used for cleaning, which directly affects IAQ. Because of inadequate filtration, most standard vacuum cleaners only capture the larger dust particles and expel the smaller particles back into the air through the exhaust. Rather than removing the small dust particles, your vacuum may be redistributing this matter back into your facility's environment where it could be inhaled by occupants or settle on surfaces.

Continued on page 2



page 2 of Improved Indoor Air Quality

This can be prevented by using vacuums that utilize High Efficiency Particulate Air (HEPA) filters which remove 99.97% of allergens, dust, and other particulate matter from floors and the air. You can learn more by consulting the Carpet and Rug Institute (www.carpet-rug.com), which offers ratings and certification based on a vacuum's ability to meet various operation and filtration standards.

In addition to vacuums, you should examine your mops and cleaning cloths for possible improvements. One way they can be improved is by using microfiber. Microfiber is a new material used for mops and cleaning cloths that is much more absorbent than traditional cloth and actually attracts dirt with its static charge, which in turn leads to less chemicals and particulate in the air. Also, there are new Chemical Dilution Control Systems that mix chemicals automatically so that the likelihood of spills and dispersion of chemicals into the air is greatly diminished.

Your cleaning practices directly influence the quality of the air that you and your building's occupants breathe everyday. Make sure that your building service contractor understands issues related to indoor air quality. Tailoring your cleaning and maintenance to include air-conscious elements is a cost effective and flexible way to ensure good IAQ and therefore better health and productivity. Start thinking about your building's IAQ now instead of being forced to think about it when it becomes a costly problem down the road.

