

GREEN TECH THE SERIES COLUMN FOR OCTOBER 28, 2015  
HEADLINE: INDOOR AIR QUALITY; A DIFFERENT APPROACH

If there is one subject that has received constant attention in the past few years, it is indoor air quality, or should I say the lack of it, in the vast majority of homes. While air quality affects everyone, occupants of homes who have allergies, chronic health issues, the elderly and young children are most affected. The primary source of toxins and airborne gases are the particles we have in most homes, pets and smoking being the largest contributors.

Most common air borne irritants are taken care of with good housekeeping, which is why many homeowners question the use of such equipment as HRV's and whole house ventilation systems. I am constantly amazed when we are in a home how few filters; both furnace and HRV, if equipped, are cleaned or changed. It's well documented that volatile organic compounds (VOC) released by organic solvents are contained in carpeting, particle board, paints and many cleaning supplies. Venting a home, just opening the windows and doors can make a difference. However, in our winter climate, this is rarely done. Common bathroom exhaust fans are not used as recommended and few kitchen stove hoods are vented to the exterior; they are no more than a light and a minimal filter at best.

Air purification systems like room ionizers use electronically charged plates to produce positively or negatively charged gas ions that particulate matter passing over these plates, something similar to static electricity. I am aware of equipment called ozone generators and, while effective for fire restoration, they are not recommended for constant household use. Antibacterial and low odour additives for paint have been around for centuries. Simple things, such as the use of silver in water, was used by the Egyptians to prevent algae and contamination. In the American Wild West, they did the same thing in cattle water troughs. They did not know why this worked; it just did. Paint with a silver content will kill a majority of bacteria and viruses. This additive is not permitted today, however.

I receive a steady stream of "new and green" products and I admit I take most of these with a grain of salt; a large grain, actually. They are often repackaged or so minimally altered from the original product that to call them "green" is a scam, at best. I do have a small number of reliable informants, publications and contacts that have proven reliable over the years, so when I first heard of "Air-ReNu" from one of my sources, I was curious as to the content and. Turns out that the folks at Air-ReNu have found another option to help with indoor air quality. Located in Palm Coast, Florida, a small US company has quietly, "with the help of an initial

Chinese formula, using nano ionic technology, far infrared rays and a proprietary manufacturing process, developed a paint additive to permanently remove embedded odors caused by smoking, pets, cat urine and other bacterial proliferation” says Vincent Valle, founder and President of this unique enterprise.

Being curious, I called the company and spoke to Bert Gruder, the product manager and son-in-law of founder Valle. While this is a simple product to add to paint, understanding how it works is another matter, entirely, and Bert was very patient with my questions. Bert commented that Vincent found this product in China some years ago, brought it to the US, upgraded it using natural materials and, currently, it is marketed via the Internet. During the interview, I asked Bert why, with such rave reviews, they have not gone to a large big box store like Home Depot. He chuckled and said the Home Depot offices were all painted with their product, but they declined taking the product on due to the difficulty in promoting it to the average homeowner. Price is also another stumbling block. To bring this product to Canada, enough for a 4L can would run close to \$50.00 by the time shipping, exchange and border fees are calculated.

What is Air ReNu? Bert explained that it is a proprietary blend of naturally occurring polymeric materials that are used in water purification to detox and remove impurities; they are inorganic, natural, nontoxic and environmentally safe. This blended material, ground into a fine powder and then mixed in paint produces a continuous flow of negative ions, detoxifying the air while removing offensive odours. Most odour molecules that float in the air are positively charged. These particles act as large collectors of toxic chemicals, such as animal urine or smoke odours. The negative ions are attracted to this positive charge like opposite ends of a magnet. When the negative ions give up their charge to the particle, they become attracted to other positively charged particles that then become too heavy to remain air borne. Normal household convection air movement activates this process and, as the warm air rises over the painted walls, the anions are released. These particles are electrostatically attracted to the positively charged particles. This results in neutralized particles, eliminating the odor and allowing good normal housekeeping to sweep them up.

Air ReNu promotes their product as serviceable for the life of the paint job, or up to 8-12 years. So much for the constant purchase of spray indoor air fresheners on a constant basis. Special thanks to Bert for taking time to answer my questions. While not cheap, if you have anyone in the home with allergies, health issues or the major occupancy is seniors or a large number of children, this product may be worth a look. Bert stated they have over 7000 customers with

only one complaint. That's a pretty good track record for a unique product such as this.

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