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In the fall of 2009, members of the Detroit-Wayne Joint Building Authority staff attended a DTE Energy conference. One of the presentations was by Jeff Seippel, President of GreenAir Environmental. He laid out a program utilizing patented technology refined through their partnership with such institutions as the University of Michigan, The Department of Energy and the Institute of Standards and Technology which showed signs of optimizing air handler coil performance to levels previously thought to be unachievable. As the owner and operator of 50 year old air handling systems, we were naturally intrigued by the notion of cleaning our coils with this new technology with the hopes of increasing their performance and useful life cycle. Even modest gains in performance would have justified the effort required, as the logistics of coils replacement were both expensive and disruptive to tenant comfort.

Our previous coil maintenance efforts involved power washing and the use of CO2 compressed air to clear the coil pathways. In spite of our efforts, the flow through many of the coils remained constricted in many areas, indicating a loss of performance and resulting in higher operating costs. We contracted with GreenAir to use their patented process on our nine main air handling systems. Our cooling coils are about 16 inches thick, yet we could see this process was easily removing dirt and debris all the way through the entire coil surface area. Visually, there was a dramatic difference in the appearance of the coils.

Testing protocols were used to quantify the performance changes. Air flow mapping prior to cleaning and after were settled on as the best alternative in this application. Results of the pre-cleaning tests confirmed our suspicion of dead spots in the coils. The post-cleaning results showed airflow increases of 23% on average, and some units as high as 45%. This increase in performance was not only way beyond our original expectations but also had a significant impact on our operating costs. Some added benefits were increased useful life, improved IAQ through coil sterilization, improved tenant comfort and the ability to dial back on the setpoints due to higher efficiencies gained.

GreenAir earned our trust and respect while working in some very sensitive areas. It was refreshing to work with a company that over delivered on the service in a timely and economical manner. We would highly recommend their services for any new potential customers.


Gregory R. McDuffee— Executive Director Detroit-Wayne Joint Building Authority