

TITLE:***Conditioned Based HVAC Air Filter and Coil Maintenance Saves Money and Time*****ABSTRACT:**

Health care facility managers and engineers are becoming more aware that delivering cost effective clean air is becoming more challenging. According to the U.S. Environmental Protection Agency (US-EPA), more than half the indoor air quality related complaints are due to poorly operated and maintained air handling systems. The US-EPA also states that about 50 percent of all electricity in the United States is consumed by commercial buildings, health care and industrial facilities. About 35 percent of that figure is consumed by operating HVAC systems. Responsible managers are therefore looking for opportunities to improve or sustain indoor air quality while reducing or limiting HVAC operating costs.

Facility energy surveys often focus on lighting, variable frequency drives, air balancing, and energy center control for cost saving opportunities. This presentation explores the benefits of fine-tuning and reducing HVAC energy consumption, while sustaining acceptable Indoor Air Quality. We will identify the impact and benefit of proper air handler coil maintenance and innovations in air filtration technology. Many health care facilities nationwide have reduced energy costs, reduced solid waste, and reallocated manpower by optimizing air filter selection and coil cleaning. Others have also earned LEED points and rebates. The focus of this presentation is operating systems in a clean, effective and efficient manner through new technology, measurement, and operation – setting the stage for Condition Based Maintenance.

BIOGRAPHY:

Eric Myers, M.Sc.

Eric Myers is an Industry Technical Consultant with Environmental Hygiene Services a Business of Nalco Company. He investigates indoor environmental quality issues including *Legionella*, fungus, and indoor air quality; recommends risk reduction strategies; develops strategies for environmental monitoring; evaluates new technology; provides training; and teaches at seminars. He is an Ohio State University graduate in Food Science and Nutrition with emphasis in food microbiology, and he is a graduate of the University of Illinois with a master of science in Food Science and Microbiology. Eric is also a National Air Filtration Association Certified Air Filter Specialist, and a member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the American Industrial Hygiene Association (AIHA), and the Indoor Air Quality Association (IAQA).

Before coming to Nalco, Eric served as a Staff Microbiologist for Abbott Laboratories, a global leader in the pharmaceutical industry. He developed new microbiological test methods for products and environmental sampling techniques and programs. He also served as Project Manager for Silliker Laboratories, the world's largest private contract laboratory serving the food industry, where he managed food pathogen and shelf-life studies. Eric also served as an instructor of laboratory methods for detection of foodborne pathogens.