

DIRECTOR

News, Best Practices & Professional Development for AL Administrators

Product Profile

May 23, 2005

Air Improvements Aid Bottom Line

When the Executive Director of a 74-resident South Carolina assisted living facility was offered the opportunity to test a new odor elimination system, her decision was easy. For two years she had tried everything -- with little success -- to solve the odor problem in the community's 24-room Alzheimer's wing. Now, two years later, the problem is just a noxious memory. In spite of intensive (and expensive) odor reduction efforts -- aerosols, deodorizers, perfumes, air misters, "we had Alzheimer's wing resident move-outs and caregivers who toured but then wouldn't respond to our follow-up efforts," the ED told ALD. "The odor caused by the constant inconstancy and the restricted space was the major problem."

Odors attach to particulate in the air, circulate, contaminate surfaces, and reabsorbed into carpet, bedding, and even clothing. "Cleaning surfaces is temporary and freshening the air just covers the problem up, neither approach solves the problem" said the ED. She jumped at the chance to test an air purification system in the Alzheimer's wing which was designed to cleanse the air of odors and microbials (viruses, germs, bacteria and mold) without creating chemicals and unhealthy gases.

Within days after installing the AirScrub System, the improvement in the air quality was dramatic. Occupancy soon increased to one hundred percent and there has been a waiting list for the Alzheimer's wing for the last year.

"I wanted a controlled test, so I

measured and quantified everything I could think of -- employee call-outs, resident sickness, as well as costs and occupancy rates -- before and after," said the ED. "By any measure, the test was a success. Staff absenteeism and turn-over has improved substantially. And, surprisingly, not only are our Alzheimer's wing residents sick less often than they were before the system was installed, they are sick less often than our residents in the rest of the facility (in which the system was not tested). We have not had one case of pneumonia in the Alzheimer's wing in two years. I wish there were a Smell-O-Meter that could demonstrate the difference the system makes in air quality."

Since the system was installed, the ALF has experienced higher revenues and lower costs -- not a bad combination. Among the quantifiable results:

- \$97,200 annual revenue increase;
- \$14,000 savings on reduced carpet and bedding replacement;
- \$5,400 savings by eliminating odor "cover ups"; and
- \$7,700 savings due to lower staff absenteeism.

The AirScrub System was developed by Clean Air Systems Engineering, Inc. (CASE) of Aiken, South Carolina to eliminate odors and improve the environment of healthcare facilities, particularly assisted living facilities. It utilizes Photohydroionization (PHI) technology that scrubs the air up to ten times per hour. According to the product literature, PHI "has the distinction of being the only technology approved by the Chinese government to

protect its population from the recent SARS outbreak" and "is the only air purification system tested and proven to kill the Norwalk (cruise ship) virus." After providing a preliminary estimate based on information supplied by telephone (including the square footage of the facility and the number of air handlers), CASE typically conducts a site assessment and prepares a full proposal. System components are installed in the facility's HVAC ducts. Installation takes from one to three days, depending upon the size of the facility and the accessibility of the air handling equipment, and is included in the purchase price.

The total capital expense is generally less than \$1,000 per resident room. There are no operating costs. There is a two-year warranty on AirScrub System equipment. CASE offers a Service Contract that extends the equipment warranty to three years. Leasing programs are also available.

"By achieving specific air quality goals, our assisted living clients are often able to realize a return on investment in a short period of time," Jo Whitson, CASE President, told ALD. And just as important: "The Alzheimer's wing now has a clean smell, but not a disinfectant smell," says the South Carolina ED. "You wouldn't believe the difference it has made."

For more information, contact Clean Air Systems Engineering, Inc., 1632 Huckleberry Drive, Aiken, SC 29803; call 803-641-6000 or send an e-mail to: info@airscrub.com