Aircuity case study

St. Johns River Water Management District

Aircuity Reduces Utility Costs While Providing a Good Environment for Lab Technicians

St. JOHNS RIVER WATER MANAGEMENT DISTRICT is responsible for managing groundwater and surface water resources in all or part of 18 counties in northeast and east central Florida. Their mission is: "To protect our natural resources and support Florida's growth by ensuring the sustainable use of Florida's water for the benefit of the people of the district and the state." Reducing energy use is important to the district and the performance of each building on the Palatka campus was tracked over a period of time. Running at 8 air changes an hour (ACH), using 100% outside air, the lab building was found to be the load hog of the group. The district facility staff searched for a way to reduce energy use in the building while continuing to provide a safe environment for the lab technicians.

Aircuity channel partner, Nelson & Company, brought Aircuity to the district as the solution for both energy efficiency and an enhanced indoor environmental quality (IEQ). Aircuity was installed in 12 rooms within the 68,000 square foot lab building to create a measurably better environment.

Air charge rates were originally set at 8 ACH, however once Aircuity was installed, the labs were able to safely run at 4 ACH during occupied times and 2 when unoccupied. If an event is sensed in one of the lab spaces, ventilation rates are increased until the air is cleaned once again. Optimizing the ventilation has enabled the St. Johns River Water Management District to save approximately \$24,000 a year with a payback period of less than 2 years!



The district frequently uses Aircuity's graphing and exporting function to track and investigate events that take place within the labs. "We noticed a spike in the data on a Sunday afternoon," explained Sam Morris, Facilities Program Manager. "That period of increased contaminants and ventilation rates could be directly attributed to when a cabinet vendor was in the space applying epoxy to the cabinet doors. It took 11 hours to dry and then the ventilation rates dropped back down to their minimum flows again.

"Aircuity has worked flawlessly in our lab building," said Morris. "In addition, the customer service that I've received from Nelson & Company and Aircuity has been outstanding. Along with sensor exchanges, if they see that a system component is showing signs of failure, they will come and install a replacement part. It is an easy system to have operating."

Sam Morris, Facilities Program Manager St. Johns River Water Managment District



ABOUT THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

St. Johns River Water Management District staff are committed to ensuring the sustainable use and protection of water resources for the benefit of the people of the district and the state of Florida. The St. Johns River Water Management District is one of five districts in Florida managing groundwater and surface water supplies in the state. The district encompasses all or part of 18 northeast and east-central Florida counties. District staff work from service centers in Palatka, Jacksonville, Maitland and Palm Bay. District headquarters are in Palatka, and staff also are available to serve the public at service centers in Maitland, Jacksonville and Palm Bay.

ABOUT AIRCUITY

Aircuity creates measurably better environments while taking a bite out of energy goals. The company's smart automated airside solutions optimize air change rates based on comprehensive indoor environmental data. As a result, commercial, institutional and lab building owners can lower operating costs, improve safety and cut energy use by up to 60%. Founded in 2000 and headquartered in Newton, MA, Aircuity's solutions have benefited organizations such as the University of Pennsylvania, Eli Lilly, Masdar City, the Bank of America Tower and the University of California- Irvine. For additional information on the company and its solutions, please visit: http://www.aircuity.com.

