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Case Study

Trinidad Consulting Firm Uses IAQ Monitoring to Confirm New Buildings are Fit for Purpose Kaizen Environmental Services is an international environmental consultancy firm that has many years of experience in air quality monitoring.



Project Kaizen Environmental Services

Location Trinidad and Tobago

Date 2014 Services Series 500 Portable Indoor Monitor

Measurements CO, CO₂, VOC, Temperature and Relative Humidity

<mark>Sector</mark> Indoor



The customer



Kaizen Environmental Services (Trinidad) Ltd. are an international environmental consulting firm who provide a wide range of solutions for environmental problems within Trinidad and Tobago and the Caribbean region. The company has grown from a single facility in La Brea with 20 employees to three offices and 80 full-time employees within four main environmental divisions. They have been operating since 1995 and work with clients ranging from local to multinational and state-owned companies.

Aeroqual Limited

Their team of environmental professionals are experienced with measuring both indoor and outdoor air quality. They have used a wide range of monitoring instruments in the past and fully understand the complexities of air quality monitoring.

The problem

In recent years there has been a growing awareness about the negative health impacts caused by poor indoor air quality. This has triggered many commercial sectors in Trinidad and Tobago to request indoor air quality assessments for their offices.

Kaizen Environmental Services was contracted to perform an indoor air quality monitoring assessment for a newly built building designed to be used as office space. The building needed to be assessed to ensure it met the



required health and safety standards for commercial use. The parameters that needed to be measured were CO, CO₂, VOC, Temperature and Relative Humidity. Kaizen required a user-friendly, low cost instrument capable of measuring the key parameters simultaneously and accurately.

The solution



Kaizen Environmental Services have worked with Aeroqual since 2013, purchasing a range of air quality monitors and sensors. When the request came for an IAQ monitor Kaizen contacted Aeroqual looking for a solution. After discussion with the end customer it was agreed that the Series 500 Portable Indoor Monitor, with a multi-gas sensor head and Temp/RH sensor probe, was the most suitable instrument for the testing required.

The large digital display on the Series 500 was capable of showing instantaneous readings of all 5 parameters (CO, CO_2 , VOC, TEMP and RH) on a scrolling screen. The data could also be logged directly to the on-board memory. The indoor air quality assessment was successfully completed in a very short time period due to the ability to measure at multiple locations using the same instrument. Data from each location was tagged using the Location ID function. This made it clear which location the data was recorded from during the post analysis phase.

The instrument was able to confirm the newly constructed building was safe for workers and could now be used as office space without any concern.

"The monitor was easy to use and very convenient in the sense that all the parameters that needed to be tested were presented on the display simultaneously and reported accurately."

Kaizen Environmental Services

Evaluation

The technicians at Kaizen Environmental Services found the Aeroqual Series 500 Portable Indoor Monitor to be an easy-to-use instrument. The long-life battery allowed for a full day of monitoring which made it very convenient.

Not only was the monitor base a user-friendly tool, the sensors were reliable, accurate and responded to even slight changes in concentration with very little time delay. The PC software was very simple to use and acted as a useful tool to view the collected data. As a result, there were no delays during the building assessment. Each step from the monitoring to the data analysis ran smoothly.