

Sensor-based Indoor Air Quality Analytics and Consulting

Proactive and predictive indoor air quality monitoring



Strategically monitor and manage indoor air quality

TRC's digital capabilities enhance our indoor air quality services with sensor-based monitoring, data management and analytics. These advances help our clients proactively plan and predict indoor air quality responses that enable rapid deployment of service teams to address issues more quickly.

A New Normal

During this unprecedented outbreak of the coronavirus disease (COVID-19), companies are rethinking facility management approaches to include industrial hygiene and health and safety practices. As businesses think forward to recovery and beyond, providing employees and customers with peace of mind around pathogens and safety will be paramount. New technologies and solutions for real-time detection of bioaerosols like bacteria, viruses and fungal spores will be in heightened demand.

TRC's Indoor Air Quality (IAQ) practice can help establish that your facility is safe by providing sensor selection, installation, data management and analytics dashboards, consulting and inspections.

Sensor Technology

There is a wide variety of sensors on the market to monitor air quality contaminants, including bioaerosols. TRC is knowledgeable of the different solutions and can recommend and deploy the right one to fit your needs and provide enhanced safety and assurance around air quality. In addition to deploying existing sensor solutions, we are working with our research partners to develop the next wave of bioaerosol sensors so that we may bring the latest technology to your IAQ monitoring project.

Data Management and Analytics Dashboards

As IAQ levels are monitored by the installed sensors, data is fed in real-time to our secure data management system. The information is incorporated into dashboards pre-configured with each clients' specific monitoring needs and action levels in mind. These dashboards provide a consolidated view of the data appropriate to the needs of your stakeholders.

Air Quality Consulting and Service

TRC teams with your organization to develop site- and location-specific sampling and monitoring strategies using evolving software and hardware technology to rapidly identify potential IAQ concerns. Ongoing management of data integrated with your building management system provides simple reporting for internal documentation or external reporting.

IAQ assessments are conducted using a combination of visual inspections, real-time air monitoring instrumentation, and traditional industrial hygiene air sampling techniques. The various outputs of these assessment techniques are all supported by an integrated digital solutions platform for rapid reporting of findings.

If contaminants are detected, or levels are flagged as abnormal, our system will automatically alert you as well as TRC. These concerns can quickly be addressed by TRC's local service teams to help you understand what is going on and more importantly, what you can do to make sure your facility and employees are safe.

With proactive data monitoring, businesses can alleviate indoor air quality safety concerns and ensure that their facilities can support employees, events and public assembly.



TRC can customize a continuous IAQ monitoring system to measure a range of physical, chemical and biological parameters	
Physical Parameters	Chemical and Biological Parameters
Barometric pressure	Bioaerosols
Dew point	Carbon dioxide
Relative humidity	Carbon monoxide
Temperature	Formaldehyde
Particulate matter, 1 µm	Hydrogen sulfide
Particulate matter, 2.5 µm	Methane
Particulate matter, 10 μm	Nitrogen dioxide
	Oxygen
	Ozone
	Sulfur dioxide
	Volatile organic compounds

About TRC

Groundbreaker. Game changer. Innovator. TRC is a global firm providing environmentally focused and digitally powered solutions that address local needs. For more than 50 years, we have set the bar for clients who require consulting, construction, engineering and management services, combining science with the latest technology to devise solutions that stand the test of time.

TRC's nearly 6,000 professionals serve a broad range of public and private clients, guiding complex projects from conception to completion to help solve the toughest challenges. We break through barriers for our clients and help them follow through for sustainable results.

















Digital Solutions