



Project

Suriname Air Quality Monitoring

Application

Urban Air Monitoring, Construction, Remediation, Mining

Scope

Building lasting change by growing awareness of air quality monitoring, carrying out baseline assessments, and working towards a national air quality monitoring database.



Equipment and services

Aeroqual AQS 1, Ranger, Series 500
CO₂, NO₂, O₃, SO₂, VOCs, PM₁₀

Equipment partner

Enviromen BV

Date

2016 - 2026

Transforming Suriname's air quality monitoring capabilities for good

ILACO, a leading consultancy and engineering firm in Suriname, is helping to strengthen air quality monitoring in the country.

Located on the northeast coast of South America, Suriname does not yet have its own national air quality standards. In recent years, however, awareness of air quality and its potential public health impacts has grown significantly. New environmental legislation requires many, if not all, industrial projects to conduct environmental impact assessments (EIA's) and, where required by the national environmental authority (NMA), baseline environmental monitoring.

In one recent example involving construction of a large-scale waste treatment plant, ILACO chose the Aeroqual AQS 1 Air Quality Monitor. Described as the "ideal setup" by Shareen Koenjbiharie, head of ILACO's environmental department, the AQS 1 enables simultaneous measurement of particulate matter and a range of airborne gas pollutants. ILACO typically deploys the compact AQS 1 at a monitoring location for five to seven days, capturing variations in air quality across the week. In the absence of national standards, ILACO uses the World Health Organization's (WHO) global air quality guidelines as a key reference point when interpreting monitoring results.

Project challenges

Some of ILACO's biggest day-to-day challenges are linked to Suriname's location and the remoteness of many monitoring sites. These challenges range from accessing technical support and servicing to reliably powering instruments in the field. Although Aeroqual's instruments can be calibrated in the field, ILACO chooses to send them to Europe for calibration by its Netherlands-based supplier, Enviromen BV, providing additional assurance that calibration is performed in line with ISO requirements.

"Thankfully, the service provided by Bendert and the entire Enviromen team has been excellent", said Shareen Koenjbiharie. "From travelling to Suriname to provide hands-on coaching on the newer instruments, to promptly responding to any technical queries, having that reliable base of support from our supplier is key, especially when local, on-the-ground technical support is limited."

Suriname's tropical climate creates another demanding monitoring environment. The AQS 1 is designed for challenging outdoor conditions, with a broad operating range and a robust IP65-rated enclosure with solar shielding. The added PCX module also incorporates an efficient inlet heater, helping to minimize humidity-related interference.

Project outcome

ILACO first encountered Aeroqual's solutions in 2016, and the experience made a lasting impression. "It was immediately apparent that the instruments were of a high quality, and the near-reference correlation to US EPA analyzers was a major advantage. Since then, we have never felt the need to move to another instrument platform."

As companies adapt to new legislation and awareness of the importance of air quality monitoring in Suriname continues to grow, ILACO is receiving more requests than they currently have capacity for. "We expect to receive even more air quality monitoring requests in the coming years", said Shareen Koenjbiharie. "Our aim is to continue expanding our monitoring capacity and instrument inventory so that we can support that growth while maintaining the quality and reliability of our work."