Building a healthier Brooklyn: Aeroqual & Langan collaborate

Langan uses Aeroqual's technology to streamline air monitoring compliance on the Alafia project that will provide 2,400 homes and address community health disparities.

Aeroqual is proud to partner with Langan for air monitoring on the Alafia Development in East New York. Alafia is a Vital Brooklyn Initiative designed as a wellness-oriented estate to provide 2,400 affordable homes for the community. The $1.2 billion multi-phase build is on a 27-acre decommissioned public site. As project lead, Langan must comply with New York State's Department of Environmental Conservation (DEC) and Department of Health (DOH) regulation DER-10, requiring a Community Air Monitoring Plan (CAMP).

Project challenges

Originally a salt marsh with natural organic deposits, the site was landfilled with material containing heavy metals and polycyclic aromatic hydrocarbons (PAHs). When soil sampling detected methane at levels of concern, methane monitoring was added to the CAMP, along with particulates (PM_{10}) and volatile organic compounds (VOC). This presented a challenge as the monitors had to be set up and calibrated before construction began each day.

Initially, Langan used multi-gas meters attached to DustTraks™ and MiniRAE PIDs. However, these setups were cumbersome and time-consuming to calibrate daily. Langan replaced them with Aeroqual AQS all-in-one monitors, which are compact, easy to set up and move around, and feature automatic calibration. Placed downwind and upwind of site activities, they measured PM_{10}, VOCs, methane, and wind in real time.

Project outcome

Langan provided input into Aeroqual's software, which automatically calculates contributions and generates daily PDF reports for compliance. This has been a significant time-saver, resulting in cost reductions for the project. Once completed and occupied, Alafia will address chronic social, economic, and health disparities in a historically underserved area.

> "Aeroqual's solution automates our data reporting, simplifies deployment, and allows less frequent calibrations without compromising data quality."
>
> **Greg Wyka**
> **Senior Project Geologist, Langan**

Project

Alafia Development
Brooklyn, NY, USA

Application

Site Remediation, Construction

Scope

Compliance with DER-10 CAMP requirements for reporting and controlling PM_{10}, VOC, and methane emissions.

Equipment and services

AQS monitors, Aeroqual Cloud Software, Site Contribution DER-10

PM_{10}, VOCs, Methane, Wind

Client

Apex Building Company
L+M Development Partners
Services for the UnderServed
RiseBoro Community Partnership

Consultants

Langan Engineering & Environmental

Supplier

Specto Technology

Date

2021 - 2030

Project cost

$1.2 billion