



Project

250 Water Street Brownfield Cleanup Program, Manhattan, NY, USA

Application

Site Remediation

Scope

Compliance with CAMP monitoring of particulates, VOCs, and mercury vapor potentially emitting from excavating and disposing of contaminated historic soil.



Equipment and services

10x Aeroqual AQS 1 monitors
Aeroqual Cloud & project software
PM₁₀, VOCs, mercury vapor, wind data

Client

Howard Hughes Corporation

Consultants

Langan Engineering and Environmental Services, Inc.

Equipment partner

Specto Technology

Date

2022 - current

Project cost

\$850 million when completed

250 Water Street NYSDEC Brownfield Cleanup Program

Aeroqual aided Langan in maintaining compliance with the New York State Department of Environmental Conservation (DEC) and reassured the community during challenging remediation at 250 Water Street, a 1.1-acre brownfield in Manhattan's Seaport Historic District. With a budget of \$850 million to redevelop the polluted site, Howard Hughes Corp. hired Langan to implement the Brownfield Cleanup Program.

Project challenges

Around 21,700 cubic yards of lead and mercury-impacted soil needed excavation and disposal. Due to proximity to sensitive receptors, the DEC mandated a site-specific Community Air Monitoring Plan (CAMP) to monitor particulate matter (PM₁₀), volatile organic compounds (VOCs), and mercury vapor. The initial approach used 30 instruments that required manual data downloading daily, which was laborious, and field deployment was a substantial overhead.

Langan partnered with Specto Technology to remove cost and complexity by installing ten Aeroqual AQS 1 air quality stations integrated with Jerome[®] analyzers for on-site and off-site monitoring of PM₁₀, VOCs, mercury vapor, and wind. Langan used real-time data and alerts from Aeroqual Cloud to take pre-emptive mitigation measures, such as spraying soil with odor/vapor suppressants. Daily field reports that met regulation DER-10 were generated from the cloud and replaced manual processes. The community could stay informed about air quality and receive daily updates through a project website.

Project outcome

Aeroqual's simplified, compact, portable solution proved to be a game-changer for Langan. It reduced daily setup, breakdown, and reporting time by half. Additionally, the robust CAMP solution helped minimize potential exposure, provided quality data that reassured the community, and was crucial in completing the cleanup on time and within budget.

"When you combine portability with integrating mercury meters into a single CAMP station, and real-time cloud reporting, it equates to major time and cost savings over the project."

Michael Au
Project Manager, Langan