SPECTO TECHNOLOGY
A WORLD OF SOLUTIONS

PROJECT
Anable Basin Development Project

APPLICATION
Remediation

SCOPE
Continuous, real-time perimeter air monitoring, downwind and upwind, during the stabilization of a bulkhead containing historic fill.

EQUIPMENT AND SERVICES
Two Aeroqual AQS 1 VOCs / PM10 monitors with Aeroqual OneView Software

SUPPLIER
Specto Technology

DATE
April 2024 - Current

Perimeter monitoring during a waterfront stabilization project in Queens

SCOPE: Continuous, real-time perimeter air monitoring, downwind and upwind, during the stabilization of a bulkhead containing historic fill.

Preparing a work site located on unstable ground

When Langan, one of the world's leading engineering and environmental consulting firms, was recently engaged on a complex waterfront bulkhead stabilization project in Queens, New York, they sought out Aeroqual's real-time monitoring technology. The bulkhead in question (a structure that helps retain water from coming up onto the surrounding land) was previously built up using concrete headwalls, timbers and fill, which deteriorated and eroded over time.

Controlling impacts of waterfront remediation

As part of the stabilization process, the waterfront contractor had to remove all the remnant materials and install a temporary access pathway using timber mats to transport excavators and facilitate the stabilization work. Langan developed a Soil and Materials Management Plan (SMMP) to control and document any impacts caused by earth-moving activities. As part of executing this plan, Langan consultants installed Aeroqual AQS 1 monitoring systems at upwind and downwind locations.

All-in-one perimeter monitoring

These all-in-one monitors are designed to measure Volatile Organic Compounds (VOCs), dust and airborne particulate matter less than 10 micrometers in diameter (PM10), and weather conditions that could impact site contribution. Aeroqual AQS 1 systems were placed around the site at the commencement of ground intrusive work and Langan will continue to monitor pollution levels and produce daily reports for the duration of the 7-10 month construction period estimated for stabilization to be completed.

Using Aeroqual software to auto-generate daily reports

The results of both perimeter air monitoring and daily field observations are packaged into a daily field report and shared with the New York State Department of Environmental Conservation (NYSDEC). In these reports, Langan documents soil imports and exports and progress with the stabilization work. Reports also contain Community Air Monitoring Plan (CAMP) data generated by Aeroqual OneView, Aeroqual's connected air monitoring software solution for environmental consultants.

Aeroqual OneView generates these daily reports according to selectable regulatory requirements within the software, automating the reporting process and facilitating easy compliance. By combining the Aeroqual AQS 1 with Aeroqual OneView, Langan was able to monitor site contribution, streamline daily reporting requirements, and execute an effective site monitoring plan.