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Project

Port Hope Area Initiative (PHAI) Ontario, Canada

Application

Site Remediation

Scope

Continuous, real-time perimeter air monitoring, downwind and upwind of dust-generating operations.



Equipment and services

50x Aeroqual Dust Sentry Aeroqual Cloud software

TSP, PM₁₀, PM_{2.5}

Client

Canadian Nuclear Laboratories

Consultants

WSP E&I Canada

Supplier

Specto Technology

Date

2018 - Ongoing

Project cost

CAD 2.6 billion

Air monitoring at Canada's largest remediation project

Port Hope Area Initiative is the largest environmental cleanup in Canadian history. WSP integrated Aeroqual's technology to meet the air quality objectives of two projects to clean up millions of cubic metres of low-level radioactive waste.

Aeroqual, alongside WSP, the world's leading environmental consulting firm, is proud to contribute to the Port Hope Area Initiative (PHAI) for Canadian Nuclear Laboratories (CNL). The community's voice has been instrumental in shaping this federal environmental cleanup and long-term, safe management of historic low-level radioactive waste from over 1,000 properties in the municipalities of Port Hope and Clarington.

Project challenges

The Port Hope and Port Granby projects involve constructing long-term waste management facilities and removing 1.2 million cubic metres and 1.3 million tonnes, respectively, of low-level radioactive waste. The community was concerned about dust during remediation activities.

The project's environmental objectives include perimeter air monitoring downwind and upwind of dust-generating operations. Under the PHAI dust management plan, data is checked against control and action levels. Real-time alerts inform contractors if levels are elevated so that measures can be taken to control and reduce dust. The data is also used to publish air quality reports on the PHAI website. About 50 Aeroqual Dust Sentry monitors are deployed on-site, many of which are solar-powered to run continuously.

Project outcome

Aeroqual's solution assists informed decision-making and compliance with the project's environmental objectives. Backed by defensible data, CNL's air quality protection measures safeguard the environment and public health. Air monitoring will continue in the long term as the PHAI generates environmental and socio-economic benefits for the region.

"The Aeroqual monitors and software are integral to the environmental monitoring program. The system's overall reliability and adaptability are a critical advantage in maintaining compliance with the client's and project's environmental objectives."

Eli Thompson Operations Manager, WSP E&I Canada

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