

Continuous Real-Time Gaseous Analyzers

Continuous Analyzers

One way to protect and assess air quality is through the development of Ambient Air Monitoring Programs.

Data collected from continuous air monitoring instrumentation is generally used for one or more of the following purposes;

- assess compliance with ambient air quality criteria's
- assist in process operation
- observe pollution trends and evaluate abatement strategies
- provide a data base for environmental and health related research
- assist in airshed management
- provide real-time information and data management
- address public concerns with respect to local air quality
- provide monitoring data in support of computer models
- forecasting and monitoring of smog advisories

Operating in-conjunction with telemetry and data acquisition systems, continuous air monitoring instrumentation provides for remote real-time access to air quality data. Criteria pollutants such as; Sulphur Dioxide, Carbon Monoxide, Oxides of Nitrogen and Ozone, have been continuously monitored for years to assess air quality. (Figure 1,2)

Other pollutants such as Total Reduced Sulphur (TRS), Mercury, Particulates (PM) and elemental speciation monitoring are also an integral part of ambient air monitoring programs. Advanced monitoring technologies such as Open Path Absorption Spectrometry provide continuous real-time monitoring for a number of Volatile Organic Compounds (VOCs) and criteria pollutants.

Rotek Environmental Inc. provides highly specialized air monitoring services for industry, universities, environmental consultants, federal, provincial and municipal governments.

Specialized services include;

- purchasing / leasing / rental of continuous air monitoring equipment
- installation, service, maintenance and calibration of a variety of continuous monitoring instrumentation

- management and operational oversight of ambient air monitoring networks and equipment
- QA/QC protocol management through a variety of manual, automatic and remote activated calibration sequences including audit trail administration



Figure 1 - Continuous Air Monitoring Station



Figure 2 - Continuous Air Monitoring

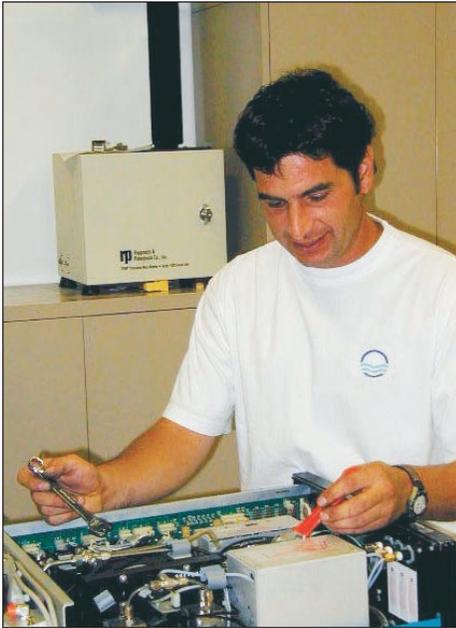


Figure 3 - In-house Repairs

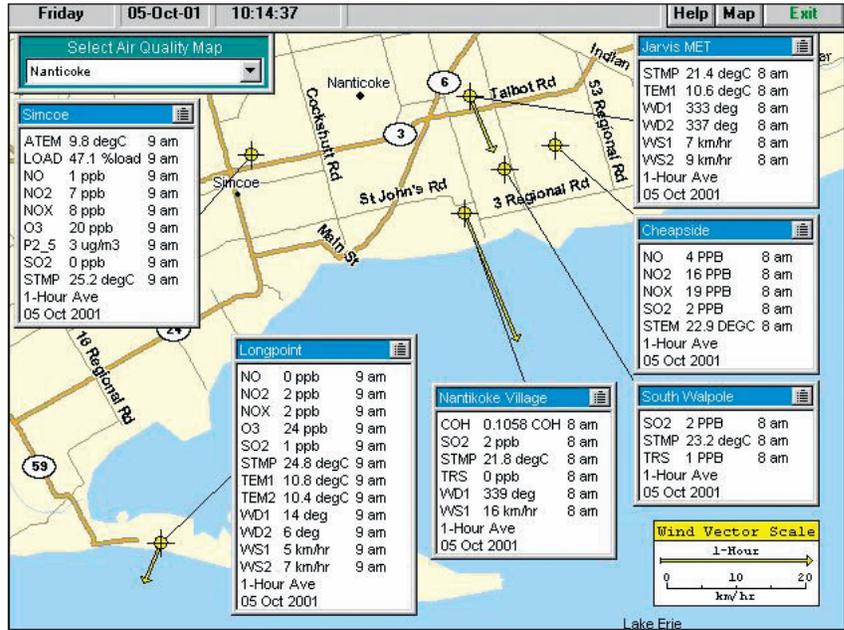


Figure 4 - Nanticoke Continuous Air Monitoring Network (Map courtesy of EMC software)

Rotek can provide the maintenance and repair services to ensure maximum percentage of valid data. We have a complete in-house diagnostics, repair and calibration facility for all continuous monitoring instrumentation. We offer an on-line tracking system for customers to check status of equipment, and maintain an inventory of replacement units to be made available during extended down periods.

Continuous real-time analyzers are an integral part of today's air monitoring. **Rotek** has over 15 years of monitoring experience in the operation and management of continuous monitoring networks including, by example, the following:

- operational oversight of the **Nanticoke Environmental Committee (NEC)**; a unique monitoring partnership between local industry in the Nanticoke area and both federal and provincial governments to assess compliance with Ambient Air Quality Criteria (AAQC) and support local abatement programs
- contractual support for the Federal National Air Surveillance Program (NAPS); a joint government program to monitor and assess the quality of ambient air in Canadian cities