



SNC-LAVALIN

Building what matters

Automated Monitoring System (SAM*)

An all-inclusive and efficient system

Monitoring environmental impact at multiple sites can be an ongoing challenge. To help our clients overcome this challenge, we have developed a cost effective and integrated tool, which measures a wide range of environmental parameters.

A highly specialized tool

SAM is used to survey numerous environmental parameters: noise, vibrations, particulate matter, atmospheric pollutants, traffic radars, weather conditions, water levels/flow rate, electrical power, etc.

A user-adjustable system

The SAM tool selects a variety of parameters based on the needs and configurations of the site.

Possible applications:

- > Weather station: wind speed and direction measurement
- > Traffic radar: traffic, noise and fugitive dust monitoring

A turnkey solution

SAM is a complete system that includes:

- > Equipment and materials
- > Periodic and automatic calibrations
- > Support and maintenance
- > Upgrades
- > Installation and removal
- > Dedicated servers
- > Real time display of data and figures recorded
- > Email alerts
- > Data analysis and storage



*SAM stands for Système automatisé de monitoring



Real-Time Analysis

The data collected from the SAM tool is used to generate real-time analysis reports.

Secured Web Servers

SAM uses extra safety measures such as private IP addresses, secure databases, database backup, and user authentication.

Key projects



Motion Detection Cameras

The motion detection cameras that are part of the system are used to measure activity levels on site.

Automatic Alerts

Any abnormal activity immediately sets off an alarm. In parallel, an email alert is sent automatically to the client.

Compliance monitoring (Canada)

SNC-Lavalin equipped Kinder Morgan Canada Inc. with customized SAM tools for the Trans Mountain Pipeline's - Burnaby Terminus (British Columbia):

- > The tool was used to monitor H₂S, SO₂ and VOC concentration, noise and weather conditions.

Environmental monitoring program (Canada)

During the extension of the Sainte-Justine Health Care Centre, Sainte-Justine Hospital used SAM to assess the noise and air quality. The collected data was used to verify compliance with the project's environmental monitoring program.

- > SNC-Lavalin was responsible for the installation, calibration, operation and monitoring of the SAM station.

Noise and weather monitoring (Brazil)

SAM was used for acoustic calibration verification, noise measurement, and weather monitoring of industrial activities in Araçariguama, Brazil.

- > SNC-Lavalin was responsible for the installation of the equipment at 4 metres above the ground for avoiding any vandalism acts.