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## HYDROFLO CONTROLS LTD. & ENVIRONNEMENT S.A. BRING AMBIENT AIR MONITORING TO THE CANADIAN MARKET

Hydroflo Controls Ltd. has been in the Environmental source testing business for over 18 years. We have been involved with supplying major industries such as Pulp & Paper, Biomass, Ammonia Nitrate plants, Diesel power generation and marine applications. All of our projects to date have been primarily in the area source testing and helping our clients and industry report their emissions. In many cases our systems are used in measuring and controlling the process for emission reduction.

Hydroflo Controls Ltd is pleased to announce our new partnership with Environnement S.A. With this new partnership, we will now have the ability to offer instrumentation for Ambient Air Quality .

**Environnement S.A** was the first manufacturer among world competitors to develop microprocessor based analyzers. Internal alarms checks, remote controls and digital processing of signals were true innovations that brought **Environnement S.A** analyzers ahead of the competition. Today, their analyzers integrate the 3rd generation of microprocessors.

In Canada, it is going to be Hydroflo Controls Ltd.'s goal to be able to supply equipment for the ambient air stations providing support and services to all **Environnement SA's** products. Not only will we be able to supply replacement 19" Rack monitoring for aged existing installations, but we will be able to deliver complete new stations or modular stations for all sectors of industry.

All equipment for SO<sub>2</sub>, H<sub>2</sub>S, TRS, VOC's, NO, NO<sub>2</sub>. NH<sub>3</sub>. NO<sub>x</sub>, CO, CO<sub>2</sub> particulates (PM<sub>2.5</sub>, PM<sub>10</sub>) can be supplied for your ambient air quality needs. We can also provide specialized data collection systems in the form of remote analyzers that can be used in the Engineering sector, Industrial centre for collecting data for Health and Safety, or for modeling dispersion.

Complementing its technologies are **Environnement S.A's** latest optical analyzers based on differential optical absorption spectrometry (DOAS). These techniques allow for open-path and point monitoring of multiple components simultaneously in the ultraviolet and visible wave-

**Environnement S.A** has always been one step ahead by developing new type of analyzers, like its on-line BTEX monitor (VOC71M) or its Beta Gauge suspended particulate analyzer (MP101M)

**Environnement S.A** offers new affordable and low maintenance possibilities. For instance, to easily control the high traffic areas in urban sites or for fence line detection around industrial sites by measuring main atmospheric pollutants : ozone, nitrogen dioxide, volatile organic compounds (VOC)

**Environnement S.A** has started an ambitious certification & approval program years ago. Our ranges of analyzers have received international approvals from major certification bodies, providing our customers with reliable system solutions for a large number of applications.



## Environnement S.A. "Always one step ahead".

Environnement S.A was the first manufacturer among world competitors to develop microprocessor based analyzers. Internal alarms checks, remote controls and digital processing of signals were true innovations that brought Environnement S.A analyzers ahead of the competition. Today their analyzers integrate the 3rd generation of microprocessors.

By developing new types of analyzers, like its on-line BTEX monitor (VOC71M) or its Beta Gauge suspended particulate analyzer (MP101M), Environnement S.A has always been one step ahead. Their latest optical analyzers are based on differential optical absorption spectrometry (DOAS). These techniques allow for open-path and point monitoring of multiple components simultaneously in the ultraviolet and visible wave lengths .

Thanks to a steady investment policy in Research & Development and to a sound acquisition strategy, the company continues to grow stronger over the years.

## MOE of ONTARIO SELECTS ENVIRONNEMENT S.A. VE3M CALIBRATOR AS ITS STANDARD FOR AQMS



**Environnement s.a**

The portable VE3M calibrator is a very important tool for maintaining and validating your air quality monitoring stations.

Some 15 years ago this product was adopted by the Ontario Ministry of Environment (MOE) for testing purposes to insure the calibration of their remote Ambient air quality stations.

The VE3M was easy to operate and allowed portable on-site calibration for their ambient air analyzers. These units were portable transfer calibration standards to be used in the field. Dynamic generation of gases by permeation or dilution of high concentration gas cylinder standards.

**The exclusive features are:**

- 3 available channels for dynamic span gas generation.
- 2 thermo-regulated permeation chambers, permanently scavenged by means of a built in micro pump.
- 1 auxiliary dilution inlet (internal gas cylinder).
- Certified permeation tubes available for most compounds (SO<sub>2</sub>, NO<sub>2</sub>, NH<sub>3</sub>, H<sub>2</sub>S, C<sub>6</sub>H<sub>6</sub>, C<sub>7</sub>H<sub>8</sub>)
- Automatic switch to DC Power (internal batteries) during transportation ( 8-hours (autonomy).
- User friendly programming via keyboard. (permeation rate)

The new VE3M has been upgraded with newer processors but is still available to provide the same portable functions as before.

The system's software features the capability of programming multiple gas concentrations for automatic multiport calibration routines. A dry contact is available to remotely control/initiate.

The VE3M can also be used as a gas cylinder to channel3 equipped with an additional optional mass flow meter.

No matter whose ambient Air analyzers you have, the VE3M is the most portable, widely used calibrator available. It is also approved by the most agencies to monitor and verify your Ambient air analyzers.





**Environnement s.a**

## Environnement S.A. AF22M for Air Quality Monitoring Stations

### SO<sub>2</sub>, H<sub>2</sub>S & TRS (*Total Reduced Sulfur*)

The new model AF22M, SO<sub>2</sub> Analyzer combines years of experience of a wide range of analyzers with an enhanced electronics package and a modular component parts design (measurement module, permeation module, 24V power supply module, analog input-output module etc.).

The outcome is an ultra compact and light-rack 3U, easy to use analyzer capable of measuring sulfur dioxide at ppb levels. Applied to SO<sub>2</sub> measurements, the universally known UV fluorescent principle consists in detecting the characteristic fluorescence radiation emitted by SO<sub>2</sub> molecules. In the presence of a specific wavelength of UV light (214 nm) the SO<sub>2</sub> molecules each a temporary excited electronic state. The subsequent relaxation produces a fluorescent radiation which is measured by a non cooled photomultiplier tube (PM)

The AF22M-CTRS Model offers the continuous TRS mode; the sample introduced in the model AF22M goes through the TRS converter, where all sulfur dioxide is removed by a SO<sub>2</sub> scrubber, The sample is then oxidized in a high temperature catalytic converter. From that stage, reduced sulfur compounds have been transformed into SO<sub>2</sub> and the sample is the injected back into the AF22M analyzer. The value displayed on the AF22M corresponds to the TRS concentration in the initial sample.

Not only does the AF22M come equipped with an enhanced aromatic hydrocarbon scrubbing system which guarantees complete removal of these interferences, it also achieves high sensitivity and stability throughout the use of an optical shutter to compensate for PM drift.



The analyzer was developed to meet customers' requirement for reduced and easier maintenance. It combines a powerful easy to use interface with quality components and design technology. Real time calibration graphs can be displayed during span check operation. Multi-tasking software, combined with the LCD graphic display, gives a user-friendly access to the instrument set-up, as well as the status and maintenance parameters. Real-time synoptic, auto-diagnostic and maintenance data screens can be displayed while the instrument is operating. The new electronics allow enhanced data storage of up to one year of 15 minutes averages, and total remote troubleshooting diagnostic capabilities via modem, using the analyzers complete display and functions emulation.

Equipped with the optional ESTEL I/O analog & digital board, the AF22M can be easily interfaced with other equipment and can be operated as a stand alone unit able to store several months of data.



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## Quality Assurance

At Hydroflo Controls Ltd, we have a firm belief that quality is of the highest importance when it comes to our products. Now that Environnement S.A is on board, we have even more to offer! Since 1995, **Environnement S.A** has been certified and complies with the rigorous ISO 9001 International Quality Assurance System. Recently audited, the company has obtained the new ISO 9001 certification, version 2000. The quality management system described in this revised standard is notably "customer centric" based, and tends to monitor the customer's degree of satisfaction. Environnement S.A. believes that quality is every employee's business and every company's partner concern.



### Professional Services

In Canada, Hydroflo Controls Ltd. has been servicing and supplying Environmental source testing equipment for over 18 years. Our office in Central Canada can supply technical, engineering, and field services as well as replacement parts .

## WHY INVEST IN ENVIRONNEMENT S.A.?

- Environnement S.A. has 30+ years experience in designing analyzers for the ambient air quality products
- Their calibration equipment is approved, certified, and used by the MOE (Ontario) for validation
- Environnement SA's **2M** series gas analyzers
  - are ultra compact, light weight
  - have unmatched sensitivity, stability, reliability
  - New 2M 18" Rack design meets all new standards, and replaces all old existing analyzers.



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