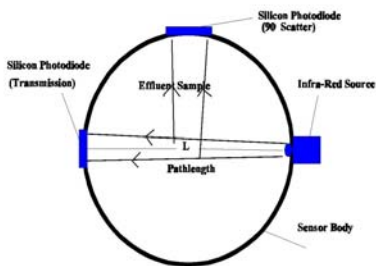




## MD Instruments celebrates its 10<sup>th</sup> Anniversary

### WQM-Turb monitors the SS/Turbidity of Final Effluents Discharge...

The WQM-Turb is designed to be installed directly in the effluent channel. NO pump or pipe-fittings are required. Easy to install, calibrate and maintain. The SS/Turbidity and Temperature parameters are continuously displayed and provided through the current outputs.



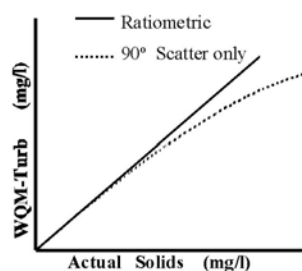
The measurement principle of the WQM-Turb is based on the ratioing of light Absorption and Scatter. This approach improves the

measurement range as well as the linearity.

Some of the advantages of the ratioing method are:

- SS/Turbidity readings are linear for a wider solids range.
- Colour effect on the measured SS/Turbidity is minimised.

The WQM-Turb is capable of controlling the WQM-CL AUTO-Cleaning unit which is supplied by MD Instruments Ltd to clean the SH1e probe at regular intervals. The WQM-Turb also provides an alarm signal to indicate high solids discharge.



### TOC Monitoring of Filtered and Raw Waters

The D-CHEK is designed to monitor continuously the COD/BOD/TOC, SS and Temperature of various Effluents.

The installed D-Chek monitors continuously the TOC, SS and Temperature of the raw and filtered waters simultaneously.

The effluent samples, under pressure, pass through the two measuring Flow-Cells. The D-Chek carries out an Auto-Cleaning and also Zero-Calibration (at set intervals) of the sensors to eliminate the effect of light source variations. The performance of the Filtration system can be assessed from the TOC levels.



### Sludge Blanket Detection... made easy

Four MCS-2S units along with a Low Power Radio Link (LPR) (housed in an IP65 GRP enclosure) were installed at a Ww T Works to

monitor both the Suspended Solids (mg/l) of the interface and then detect the sludge blanket in the final settlement tanks. By determining the blanket interface it will enable the operator, via the PLC control system, to identify any anticipated problems in the settlement process. The sludge blanket alarm, detected by the MCS-2S unit, is transmitted via the LPR Link to the SCADA system.

The sludge solids and the blanket alarm are displayed on a large backlit 2x16 Dot Matrix LCD display. The solids thresholds, current outputs, response time, relay delay time and probe calibration can all be programmed via the membrane keypad.

### Auto-Desludging of Primary Tanks...

The MCS-16S unit is installed to monitor solids (%) of the sludge discharge from the bell-mouth and then control the desludging process. The timer initiates the desludging process and once the MCS-16S unit detects a thick sludge (> 1.0% solids) it keeps desludging until the sludge becomes thin (< 0.8% solids). The SH20 probe allows monitoring of the sludge solids for up to 8.0%.

