



Case Study: EFFLUENT MONITORING SYSTEM

Rhodia's Leeds site employs over forty people, producing surfactants and biocides for the personal care, detergency and water treatment markets.

W H Good Automation Ltd, who have enjoyed a long standing relationship, were requested to change out existing effluent control equipment and replace it with a new control system.

The requirement was to maintain a consent pH range of 6-9, recorded at all times, because failure to comply may lead to prosecution.

The site is listed as lower tier COMAH (Control of Major Accident Hazards), due to the toxic materials used. CO₂ is now used to replace acids. Liquid CO₂ is stored at a pressure of 20 bar, vaporised into an injection system to allow gas dispersion into the effluent.

On the back of this success we have received orders from coatings, chemical and paper industries for similar systems.

More recently, with changes to legislation regarding effluent monitoring, we have also included flow and turbidity.



Flow Monitoring



- Easy setup
- Detailed diagnostics to OIML R49 type F
- Self cleaning electrodes
- Submersible & buriable
- Up to DN200



Turbidity Monitoring



- In-line and insertion
- Self cleaning
- Ultralow back scatter
- Virtual lifetime zero
- Conforms to ISO 7027
- Wide range: 0-250 NTU, 0-2000 FTU

pH/Temperature Monitoring



- Dual input
- Advanced diagnostics
- Monitoring and PID control
- Latest sensor technology
- Insertion, submersible and flow-through systems

Field Mountable Paperless Recorder

- Totalisation and mathematical functions
- Archiving to SD memory card (20 years + data)
- Internal 24V power supply for field instruments
- Realtime operator messages for full traceability

- Up to four analogue inputs
- Wall, pipe or panel mount to IP66
- Relay outputs for alarm conditions
- Quick and easy setup

- Secure data recording
- Ultra-slim design (90mm deep)
- Screen capture facility
- Modbus TCP



Networked PC Interface

- Ethernet connectivity
- Realtime display of process conditions

- CFR21 Part 11 reports
- Automatic e-mails

- Automatic file transfer
- Embedded web server