



### Customer Requirements

Increasingly stringent environmental regulations require manufacturers to continuously monitor and manage their effluent disposal. One particular manufacturer has an existing SCADA system to which they wish to integrate a logging solution. The logging solution must be capable of performing real time calculations and controlling the addition of chemicals to neutralise the effluent. In a pre-treatment pool.



**Pre-treatment pool:** Before effluent is discharged from the facility it must be treated in one of these pools.

### dataTaker DT80

- 1 A cost effective data logger expandable to 100 channels, 200 isolated or 300 single-ended analog inputs
- 2 Built-in web and FTP server allows for remote access to logged data, configuration and diagnostics
- 3 Modbus slave and master functionality allows connection to Modbus sensors and devices and to SCADA systems
- 4 Smart serial sensor channels capable of interfacing to RS232, RS485, RS422 and SDI-12 sensors
- 5 Rugged design and construction provides reliable operation under extreme conditions
- 6 Includes USB memory stick support for easy data and program transfer



### dataTaker Solution

#### Equipment

dataTaker DT80 data logger

#### Sensors

pH  
Flow  
Temperature

#### Implementation Notes

The dataTaker DT80 can collect data at predetermined intervals from a number of pH, temperature and flow sensors permanently installed in a waste pre-treatment plant.

The DT80 can also be programmed to calculate in real time the quantity of caustic soda that must be added to neutralize acidity of the effluent before discharge, then control this addition via relays connected to the programmable digital outputs. Similarly, the DT80 can raise alarms to alert engineers when effluent pH, temperature or volume exceeds license requirements.

Real-time data can be monitored via a SCADA system with a Modbus connection using RS485 or Ethernet, or via the dataTaker's internal web interface. Alternatively, historical data can be periodically downloaded over a network or via a USB memory stick to be reviewed on a PC in the factory, located elsewhere at the effluent disposal plant.