

## **SembCorp at Wilton UK makes further environmental investment**

Pollution and Process Monitoring is pleased to announce that SembCorp - the present owner of the Wilton International Site located in the UK, has committed to further investment in our Protoc TOC analysers.

SembCorp is a multi-faceted organisation with capability that spans the supply of Utilities, Environmental Engineering, Process Engineering and Logistics with a particularly strong presence in the Asia Pacific region. The SembUtilities division provides industry with a one-stop solution that encompasses the complete range of utility supply and support services, water and wastewater management as well as operation and maintenance services.

In the United Kingdom SembUtilities provides power, steam, water and other support services to major international chemical companies on the Wilton, Billingham and North Tees sites on Teesside, one of the largest petrochemical hubs in Europe and one of UK's most important chemical production facilities.



The Wilton Site, which started producing chemicals over 50 years ago, covers an area in excess of two thousand acres and was formally owned by the ICI Group.

Pollution and Process Monitoring have supported the site's environmental monitoring program since 1992 supplying numerous Protoc TOC analysers monitoring key site drains and effluent discharge locations. In recent years much of the land has been let to other petrochemical companies which include Dupont SA, Dow Chemicals, Unicema, Huntsman, Air Products and Invista. Low strength effluents from some of these sites in addition to SembCorp's own surface and process water (which may include waste cooling water, discharges from a commercial laboratory and potentially fire fighting water) are managed by the SembUtilities division.

The necessity to monitor and therefore manage these process effluent streams is fundamentally important in maintaining a perfectly compliant record for site discharges to the River Tees.



Environmental monitoring stations are positioned at three principal drain positions, upstream of a “buffer tank” connected by means of diversion valves. This large wastewater holding facility is used to regulate the flow and the load reaching the main outfall that is also continuously monitored for TOC, pH, Turbidity, Ammonia, Temperature and Flow.

Mike Radigan who is tasked with the selection and maintenance of the monitoring stations has selected the latest TOC analyzers from PPM –the Protoc Spyder and Web system for a number of reasons.

The PPM instrumentation has performed reliably since its original installation in 1992 and past performance needs to be considered when selecting this type of device required twenty four-seven.

Additionally, the parameter has proved to be a very useful determinant, capable of detecting all forms of organic compounds contained within wastewater. The technique also provides a fast speed of response, from 3 minutes enabling the site to actively manage effluent in real-time to stay compliant with stringent environmental legislation.

The conceptual design of the Spyder and Web system is also important. Multiple analyzer sections can be connected to a single controller. In some instances, the cost of the installation may be reduced by removing unnecessary controller duplication. In other critical applications, duplicated analyzer sections are also important where 100% data collection is required. Duplex monitoring can therefore ensure that when one analyzer is calibrating or chemically cleaning, the other is monitoring a critical effluent stream so events such as spillages or unacceptable excursions “from the norm” are not be missed.

Additionally PPM has also supplied instrumentation to measure other important parameters. The new ProAm ammonia monitor is used to identify ammoniacal-nitrogen. The IQ Sensor Net configured for turbidity is used to physically characterise the discharge identifying fluctuations in suspended solids and the alkalinity/acidity is checked using an in-line pH meter.

For more information on any application requiring on-line measurement please contact:

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