

# Monitoring for VOCs in Water Reclaimed from a Petrochemical Plant

## APPLICATION

Monitoring of reclaimed water for VOC contamination.

## CUSTOMER

Petrochemical plant in Taiwan

## PROBLEM

The customer needed an on-line method to monitor the methylene chloride and dichloromethane concentration levels in reclaimed water after a gas reclamation tower.

## PRODUCT

MS1200 with 4-20 mA output

## WHY MULTISENSOR?

The customer wanted a wide spectrum analyser to ensure compliance with the regulations.

## INSTALLATION FACTS

The sample is mainly composed of Triethylamine and Dichloromethane together with 3 - 8 % saline in reclaimed water. The water is then used in a chlor-alkali industry factory. The instrument has to be able to continuously analyse high chloride samples.

The gas reclamation tower main job is to remove the three above mentioned chemicals.

The TVOC level should not exceed 100 ppb and when this happens, the customer is notified and can adjust the process accordingly.

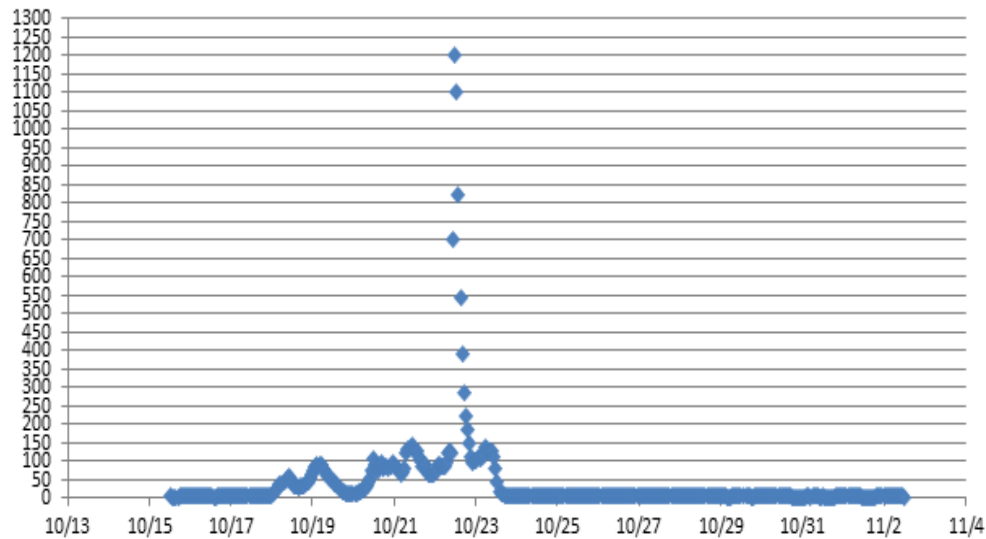
Also, higher TVOC levels can be used to identify problems such as gasket leakages and ruptured disks and acts before the problems becomes too serious. Some graphs with explanations are available in the following page.

*Learn more on the new oil in water monitor and analyser by clicking on the image*



Photo showing the MS1200 in the petrochemical plant.

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## DATA ANALYSIS

In the graph on the left we can see the result of a gasket leakage that was detected in October and resulted in a spike of the readings reported by the VOC monitor. This allowed the customer to act and prevent bigger problems.

In the graph on the right, we can see the result of some ruptured disks that were not promptly replaced and led to a number of days of high pollution. The problem was eventually fixed.

## UNDERSTANDING THE DATA

Multisensor Systems prides itself for the high level of support and assistance that it offers to its customers. This is especially important when it comes to understanding the data that the analyser is providing.

Data analysis is part of our standard support to customers who are using the oil in water analyser.

