

Monitoring for VOCs in water reclaimed from a petro-chemical plant

Application: Monitoring of reclaimed water for VOC contamination

Sector: Petro-chemical and industrial

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 4-20mA output

Customer: Petrochemical plant in Taiwan

Installation date: April 2017

Installation Facts. The sample is mainly composed of Triethylamine, Malonol and Dichloromethane together with 3 - 8 % saline in reclaimed water. The water is then used in a chlor-alkali industry factory.

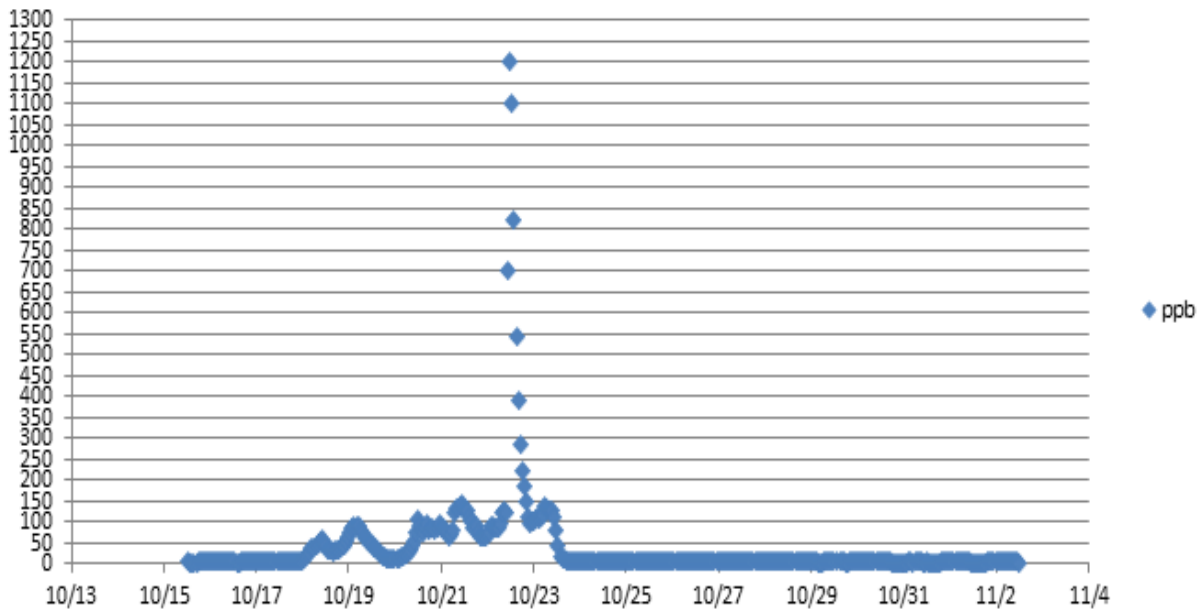
The instrument has to be able to continuously analyse high chloride samples. The gas reclamation tower main job is to remove the three above mentioned chemicals. The TVOC level should not exceed 100 ppb and when this happens, the customer is notified and can adjust the process accordingly. Also, higher 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.



Photo showing the MS1200 in the petrochemical plant

Graphs

Gasket leakage was found on 10/23, but a small amount of leakage was detected on 10/18



11/11 Process Abnormal: Ruptured Discs were not cleaned in Time and Caused Pollution

