



# Case Study: Odour Abatement

## The Background

The project was run by Cobra Hydro, leading odour consultants and odour abatement chemical manufacturer.

## The Problem

The trial site at a sewage treatment works in Essex has, for many years been a problematic site from a point of view for odour management and control. The site receives and processes sludge from Southend Sewage Treatment Works which is extremely septic and has controlled odours by a combination of liquid dosing and dry scrubbing technologies.

The liquid dosing is intended to reduce the sulphide levels to an acceptable level prior to the dry scrubbing system, so that the final scrubbing leaves a gas stream in a non noxious state.

Prior to these trials, Cobra Hydro carried out some odour logging with the RTx OdaLog H<sub>2</sub>S Logger and spot check samples with the Gastec Gas Detector Tubes. This indicated that the system was not running efficiently and H<sub>2</sub>S levels of 80ppm were regularly being emitted into the local environment.

Cobra Hydro offered to run comparative trials of the existing chemical against Cobra Hydrox, a similar formulation that relies upon chlorine dioxide as the odour control method with an objective to optimise the formulation over the period of the trial.

## The Solution

To continually monitor the H<sub>2</sub>S levels, the RTx OdaLog was the chosen instrument due to its wireless data download and its alarm notification using the in built GSM modem. These features allow the project manager to receive real time updates as to the trial progress and subsequent H<sub>2</sub>S emissions.

With an internet connection and a laptop with Odastat G software installed, the H<sub>2</sub>S data, which is key to the trial, could be accessed and reports can be written as the trial develops without having to attend site to physically download data.



Future uses would include an integration into a dosing system, allowing the dosing chemical to increase or decrease in reaction to the H<sub>2</sub>S levels. This provides a fully automated odour abatement chemical dosing system, reducing chemical usage and engineer's time spent on site, which results in an overall cost saving.

The RTx was thought to have reduced travel time by 40% compared to using the existing OdaLog L2 with no wireless capability.

**Contact a1-cbiss** if you feel that the OdaLog can help you with your toxic gas datalogging requirements