ENVIRODYNE Group Pty. Ltd.
"Environmental Dynamics"

CORPORATE PROFILE

MISSION STATEMENT

"Improve on the current knowledge base of the dynamics of environmental conditions so that more proactive responses can be applied to human activity and their resultant impacts on the finite resources we all share."

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INTRODUCTION

Envirodyne Group Pty Ltd (EDG) is a company originally formed in 2000 to amalgamate air and water quality expertise in consulting services, with the unique in-house developed technologies in Products and Systems aimed at addressing problems of automated online monitoring and process control for remote sites. With its expertise in air and water treatment systems, EDG has configured these in-house technologies to provide process control via the onsite generated monitoring data that can all be viewed remotely in real time. EDG philosophy calls for the total integration of automated monitoring and control processes as a vital means of addressing environmental regulations and online real time compliance to ensure optimum plant operation, particularly for remote sites. As part of its Products and Systems division, EDG also acts as an agent for proprietary oil-in-water separation systems

Company principals recognised that there was a need for specialised systems that can operate in remote and often difficult conditions due to the local problems or the nature of the liquid or air stream being monitored and controlled. Problems of reliable and representative sampling of many waste streams (e.g; raw sewage) have been the traditional cause of the failure previously to implement effective monitoring of remote sites. *The provision of automated solutions for reliable sampling and sample conditioning was crucial to the successful deployment of remote monitoring and control systems.*

Risk Management issues are usually the main 'drivers' behind compliance with regulatory and environmental matters associated with industrial and utility plant operations. Generally, compliance has involved the periodic collection of samples and the conduct of laboratory analysis on these samples, resulting in data only confirming conditions of plant operations at the time of sampling that may well be days after the sampling event. *At best this is window 'snapshot' data*.

PRODUCTS & SYSTEMS

Over the extended period of product development, EDG has long advocated that this grab sample approach compliance auditing of environmental regulations, will not adequately address the risk of a breach through plant malfunction or other events. *Minimising this risk* has been a major goal behind EDG Products and Systems that allow:

- The reliable automatic sampling operations of most liquid and air streams, from raw sewage to exhaust ventilation from plant processes,
- The conduct of automated analysis of the waste stream on site due to the EDG proprietary systems that condition the sample to minimise fouling, etc. that interfere with analyser reliability,
- Inbuilt condition monitoring of the remote analytical plant and associated processes,
- Transmit the analytical results in real time if required via GPRS/GSM to any designated computer anywhere in the world.
- Raise alerts via SMS/fax/email if designated parameter values are breached,
- Collect samples in a refrigerated section of the monitoring unit *if required* for more detailed analysis of the sample later in laboratory conditions,
- Provide via a duplex feature within the monitoring unit, process control of essential systems that can prevent an environmental mishap – e.g, open/close valves, start/stop pumps, fans, operation of treatment processes, etc., anywhere in the world.

EDG systems are **HydroSentinel™** for liquid phase monitoring and **StakSenitnel™** for air monitoring from vent stacks, etc.. EDG has applied for Patents for systems and components inherent to both these technologies. *Refer to Technical Brochures Nos. 2 & 3 respectively for* **HydroSentinel™** *&* **StakSentinel™** *details*.

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Besides its proprietary monitoring systems, EDG is an agent for a unique oil-in-water separation process that was originally developed as **Mycelx®** products in USA. *Refer to EDG Technical Brochure No. 4 for details.* This unique technology can be applied into cost effective solutions of industrial water treatment and reuse that address many Risk Issues with environmental compliance and community concerns about the preservation of available water resources.

EDG therefore has a suite of Products & Systems along with Consulting Services to suit the requirements of any client. See below for EDG corporate structure and some examples of our work!

COMPANY STRUCTURE

ENVIRODYNE GROUP Pty Ltd

EDG Products & Systems –

- **HydroSentinel™**
- **StakSentinel™**
- **Mycelx Oil-in-Water Treatment**

Sewage Treatment Plant Foul Air Scrubbing System
Plant Optimisation of Chemical Scrubbers
(Malabar STP for Sydney Water)

EDG Consultancy & Project Management Services -

- Air Emissions Studies & Design of Ventilation & Pollution Treatment Systems for Fume, Dust & Odour Control
- Monitoring & Control Systems for Air & Water/Wastewater Handling & Treatment Processes
- Greenhouse Gas Audits on commercial and industrial premises
- Design of Greywater and Industrial Water Treatment & Reuse Systems
- Planning for Industrial Plant Layout & Associated Design,
- Predictive Modelling of Air Emissions for Development Planning & Approvals,
- Process Control, Piping Systems for Commercial & Industrial Plant

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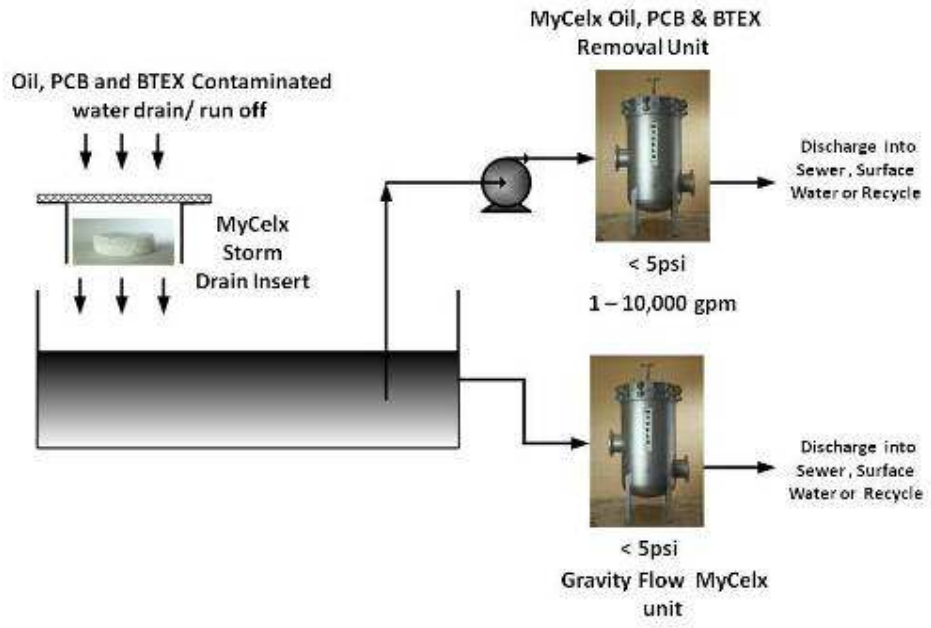
Industrial Plant – Perth, WA - Predictive Dispersion Modelling of Emissions

Packaged Industrial Wastewater Treatment Plant Illawarra. NSW



Mycelx® Oil-in-Water Separation Systems

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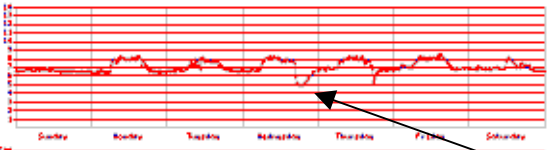
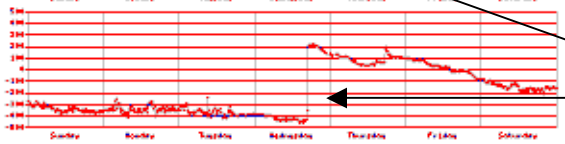
HydroSentinel™ installed at a Sydney Water Sewage Pump Station

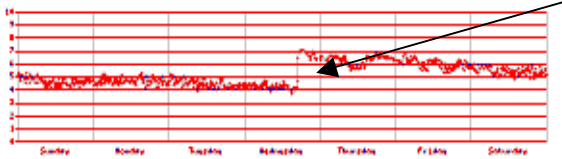
pH



ORP



Conductivity



Sewage Sample collected automatically when analysed event indicates a possible breach of licence. Sample collected in refrigerated section of monitoring unit (if required). Alarm sent via SMS to designated personnel for sample collection and later analysis at a lab. Chain of custody process activated

1st stage Biological Filters with 2nd stage Activated Carbon Foul Air Scrubbing Plant, Ductwork & Pipe-bridge (Warriewood STP for Sydney Water)

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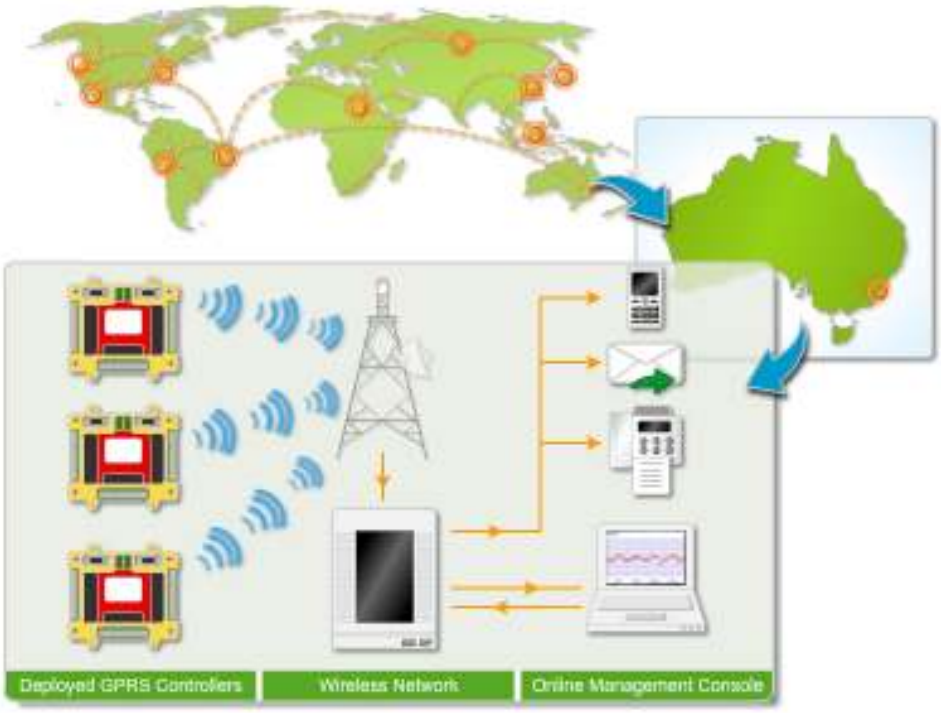
Proprietary Technologies - EDG holds patents for the **HydroSentinel™** and **StakSentinel™** systems where the issues of remote automated sampling of difficult and contaminated streams have been solved, hence allowing for the effective sampling, analysis and relay of data in real time from all types of water courses, air vents, remote machinery, etc.. EDG can provide network arrangements for plants and locations where wireless systems are clustered in close proximity to each other, thereby providing a SCADA type system for full integration into plant operations.



We thank you for your interest and look forward to your enquiries.

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