

TECHNOLOGY PROFILE ENVIRODYNE GROUP PTY LTD

Industrial Wastewater Specialists

Agents for -



INTRODUCTION

Envirodyne Group (EDG) is a technology based organisation that is pleased to represent **MYCELX®** products to industrial and utility businesses for the mitigation of persistent organic pollutants (POP) – and many oils – found in process water and industrial discharges to sewers and the environment. **MYCELX®** systems utilise a patented hydrocarbon removal matrix (HRM) membrane technology that can resolve environmental and licence requirements more cost effectively than many conventional systems, *and in many cases provide recycling of treated water.*

EDG, as an industrial water & wastewater specialist company, offers an extensive service to clients. We can conduct investigations, propose solutions and total turnkey projects that clients will find require minimal footprint, maintenance and result in a quality of treated water that may be recycled, thereby reducing risk of environmental mishap and costs of licenses. In many cases, it is possible with recycling that licenses will not be required.

Essentially, all **MYCELX®** processes and solutions are tailored to specific client requirements, and are acclaimed for the following features:

- Environmentally sound oily water process separations design,
- Low energy consumption,
- Superior performance,
- Low and environmentally sound recyclable waste generation,
- Competitive costs in both installation and operation.

MYCELX® separation systems are certified by Lloyd's Register (UK), to treat oily water to less than 5 ppm. *This certification recognises **MYCELX®** technologies as the only independently tested and certified technology for oil removal.*

MYCELX® CAPABILITIES

a) Materials Captured by MYCELX® -

- Aromatic Hydrocarbons (BTEX)
- Aliphatic Hydrocarbons & Solvents
- Crude Oil & Fuel Sheen
- Cycloalkanes
- Chlorinated Organics
- Pesticides & Persistent Organic Pollutants (POPs)
POPs –
PCBs, Dioxin, Furan, DDT, Aldrin, Chlordane,
Dieldrin, Endrin, Heptachlor, Hexachlorobenzene,
Mirex, Toxaphene
- Organic Polymers
- Vegetable Oils & Animal Fats
- Colloidal Heavy Metals
- Silicone Oils



Systems available for flows from 1 to 30 litres/sec., no moving parts, will not desorb entrained pollutants

b) **MYCELX®** infused filters permanently immobilise organic compounds with a typical single pass efficiency of 99.9%.

c) **MYCELX®** filters operate with minimal pressure drop (< 1 psi or 7kPa) even at media saturation point from viscous organic compounds.

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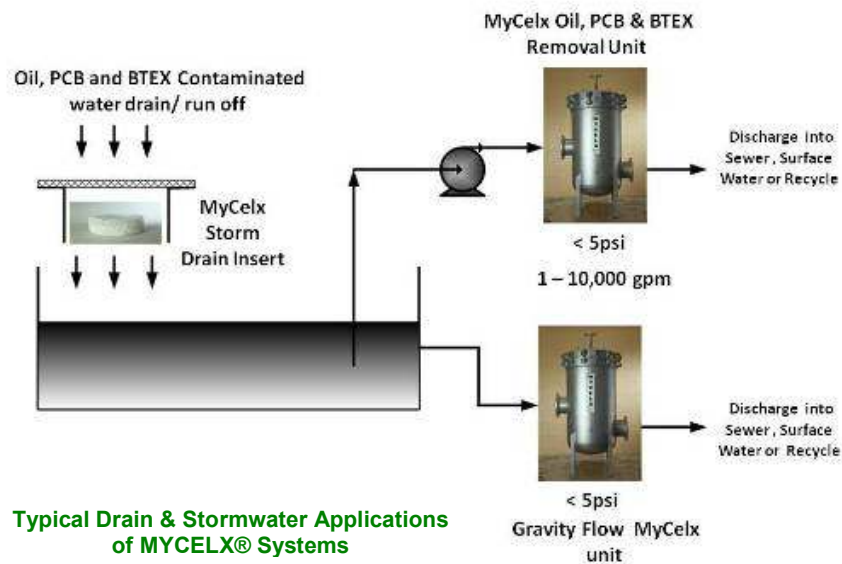
MYCELX® APPLICATIONS

MYCELX® is suitable for the following applications:

- ❑ Where lower levels of residual contaminants in the discharge of treated wastewater is required. Once gross particulate and oily materials are removed from a wastewater stream, MYCELX® systems downstream can provide total petroleum hydrocarbon (TPH) removals to below detectable levels (BDL).
- ❑ Where a pre-polishing filter is required ahead of a membrane type filter (e.g; RO or Ion Exchange) in order to protect the process from oil/hydrocarbon and/or organic overload, degradation and binding, then MYCELX® is ideal.
- ❑ When TPH and oily sheen must be removed to BDL.
- ❑ When there is insufficient space to install a large piece of equipment such as an oil/water separator, centrifuge or multimedia filter yet the treated water discharge still must be polished.

Hence MYCELX® can be found in the following installations:

- ❑ Truck & Heavy Vehicle Washing Bays, Recycling of Wash Water
- ❑ Bilge & Ballast Water onboard ships, and for treatment of water on discharge at moorings,
- ❑ Groundwater & Stormwater Run-off remediation and/or recycling (see below),
- ❑ Instrumentation, Cooling Tower & Heat Exchanger protection,
- ❑ Boiler Blowdown & Boiler or Compressor Condensate polishing,
- ❑ Tank Farm Bund Area protection from Stormwater Overflows to the environment,
- ❑ Turbine Bearing Cooling Water treatment



FURTHER INFORMATION

EDG is ready to provide further information on MYCELX® should you have questions, and we are always available to discuss your specific requirements. We thank you for your interest and look forward to further discussions with you.

CONTACT INFORMATION

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