

Odour control and management



advanced biofilter for odour control

Biofiltration is a biological treatment process commonly used to remove contaminants from the odorous air produced on wastewater treatment works.

Odour control is one of the primary concerns of emissions from wastewater treatment works, especially those located near residential areas and offices. While good process management can significantly reduce odours, in many cases odour control measures will still be required. The SUEZ Advanced Biofilter media is considered Best Available Technology for the treatment of odorous emissions. The media consists of two phases, an inorganic one and an organic.

Inorganic Phase: to provide a consistent and strong mechanical structure. The media is geometrically uniform and has high porosity enabling an even distribution of air flow and reducing headloss.

Organic Phase: a sterile coating around the inorganic phase provides a suitable support for the microorganisms, which are later inoculated. The material is odourless and does not suffer degradation by biological decomposition, minimising the production of waste.

Benefits...

- ▶ Increased deodorisation efficiency due to the presence of specifically selected range of microorganisms.
- ▶ More efficient purification due to the two-phase media.
- ▶ High mechanical strength.
- ▶ Less headloss leading to lower ventilation energy costs.
- ▶ Higher and more consistent cleaning efficiency.
- ▶ No use of chemical products.
- ▶ No intrinsic smell of biomedium.
- ▶ Longer life time.
- ▶ Can readily be retrofitted to existing Odour Control Units.



How does it work?

A support system, with an air plenum underneath, is mounted on the concrete base and a layer of expanded clay is evenly distributed over it. SUEZ Advanced Biofilter media is installed over the expanded clay.

A timer controlled irrigation system ensures the necessary moisture content is maintained.

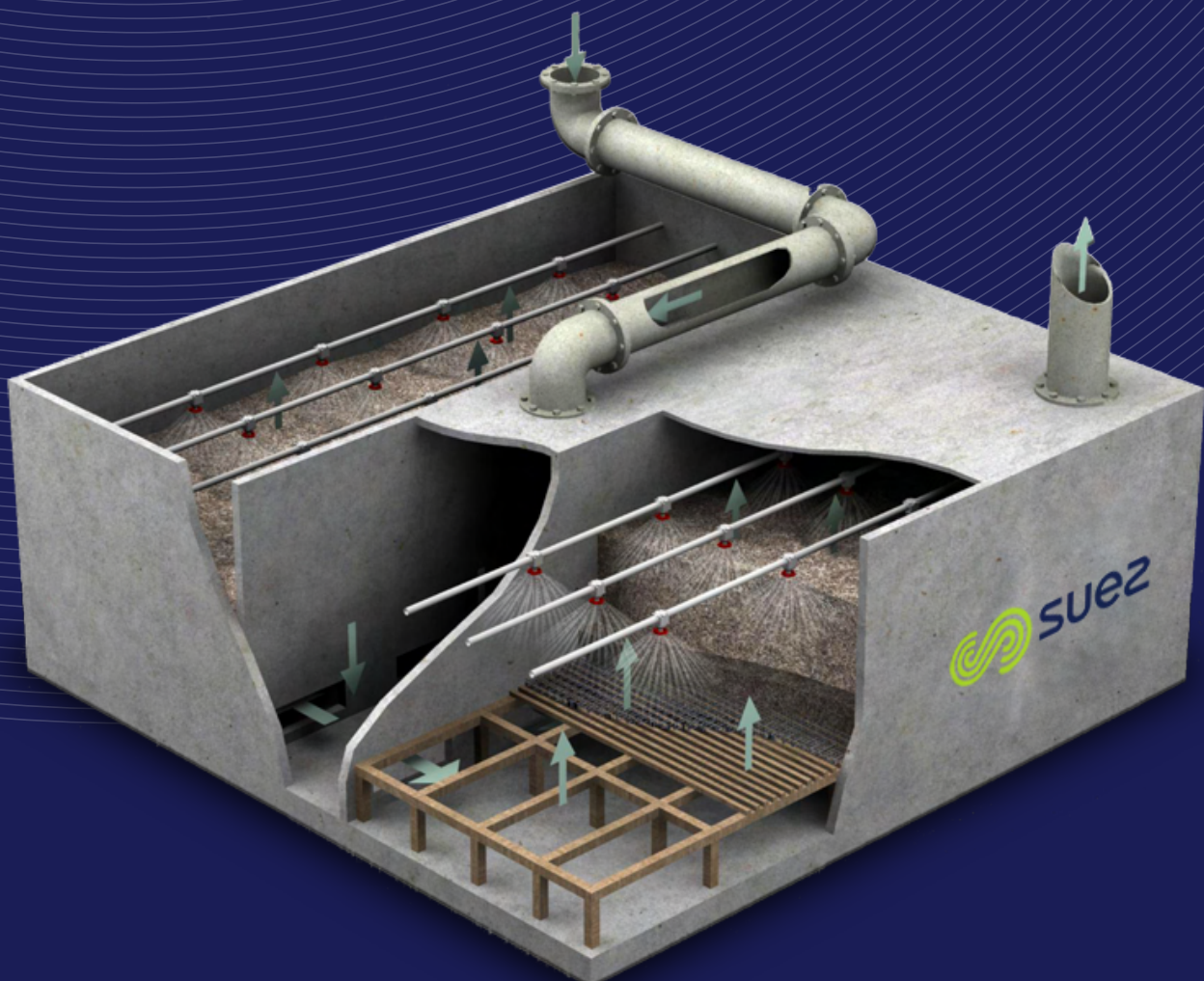
The foul air enters the plenum underneath the Advanced Biofilter media and passes up through it. After approximately 20 seconds of contact with the Advanced Biofilter media, the air has been cleaned and is discharged to the local environment through a stack.

Inlet air temperature is optimal at between 15-

35° C for maximum cleaning efficiency, but the SUEZ Advanced Biofilters operate effectively at lower temperatures.

The SUEZ Advanced Biofilter media differs from other organic biofilter types, as it does not degrade or become inactive, ensuring high efficiency performance for many years.

The SUEZ Advanced Biofilter media is sterilised to eliminate fungi, weed seeds and bacteria. Immediately after sterilisation, it is inoculated with microorganisms, specifically selected for the type of odorous air treated. This guarantees the high removal efficiency of the odour control unit.



SUEZ

290 Aztec West, BS32 4SY, Bristol

Email: info.advancedsolutions.uk@suez.com

Tel: +44 (0) 1454 804040

www.suez.co.uk

