

## **LANODOR®**

### **Biological Odor Treatment Process**

**LANODOR**<sup>®</sup> is a biological odor treatment process designed for wastewater and sludge treatment.



As a true alternative to conventional odor control methods such as physico-chemical scrubbing or activated carbon, LANODOR® can serve as a complementary solution for pretreating effluents with high concentrations of hydrogen sulfide, reducing chemical reagent consumption and operating costs.

**LANODOR**<sup>®</sup> utilizes biofiltration as a biological odor treatment process. Odorous molecules are degraded through contact with bacteria attached to a natural and inert granular material primarily composed of Biozzolane<sup>®</sup>. This selected material, derived from volcanic rock called pozzolana, possesses remarkable properties for rapid development under the implemented moisture conditions, thanks to its porosity and chemical composition.

#### **APPLICATION AREAS**

- Complete odor control in wastewater treatment plants
- Odor control in solar sludge drying greenhouses (Héliocycle, Hélioplus ...)
- Pretreatment of sources concentrated in hydrogen sulfide

#### PERFORMANCE

The **LANODOR**® process is characterized by its operability, performance, and environmental friendliness, including a low carbon footprint.

# LANODOR®

### A GENUINE ALTERNATIVE TO CONVENTIONAL DEODORIZATION

The LANODOR® process is environmentally friendly, offering:

- Reduced transportation and enhanced safety due to the absence of consumables and chemicals
- Lower maintenance and energy requirements without energy-intensive recirculation of wash solution or complex peripheral equipment •
- Longevity of the natural and mineral support material (8 to 10 years): biozzolane® does not compact like organic supports
- Long-term performance stability in terms of efficiency and flow rate through precise air distribution and control of pressure losses across the material
- Compact design compared to other biological treatments enabled by the structure of the material



A process tailored to the needs of operators: simple, cost-effective, durable, and efficient.



A sustainable carbon footprint and economic assessment

The support materials used in the LANODOR® process enable the growth of micro-organisms that eliminate by oxidation malodorous molecules such as hydrogen sulfide (H2S), ammonia (NH3) and mercaptans (R-SH) to form odorless inorganic compounds.

Regular watering of the biofilm with industrial water ensures optimum living conditions for the bacteria. It also ensures the evacuation of by-products. Recovered percolates are sent to the water treatment plant for disposal.

### CARACTÉRISTIQUES

- Standard range with structures made of synthetic materials for installation on concrete slabs indoors or outdoors
- Customized GC structure for large capacities or integration into buildings
- Water supply from a wastewater treatment plant or nutrient-enhanced water (C, N, P)
- Natural materials with a long lifespan
- High passage velocity: 500 m/h under standard conditions

### REFERENCE

Riom, Voreppe, Nort-sur-Erdre, Châteaudun, Souppes /Loing, Pont l'Abbé, Thaon les Vosges, Le Guilvinec, Crépy-en-Valois, Le Boulou, Cany-Barville, La Haye Fouassiere, Montrichard, Limoux, Espalion, Camaret /Mer, Propriano,...



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