



## Expert in **odours** treatment

John Cockerill Europe Environnement makes available the most performing technologies in order to **control odorous pollutions** from processes of **several applications**, such as:



**Public Wastewater  
Treatment plants**



**Industrial Wastewater  
Treatment plants**



**Agrifood**



**Sorting center Wastes  
recycling**



**Composting plants**



**Paper mill**

In both heavy and light chemicals, the production and transformation processes call on extensive wide range of chemical elements; resulting in a wide variety of polluting gaseous emissions: our job is to define and set up the optimal treatment solution in line with your requirements and those of the regulations in force.

**Thanks to its know-how and technological skills John Cockerill Europe Environnement helps to:**

- Protect on site operators
- Control your gaseous releases
- Preserve your working environment: buildings and equipment
- Enhance your image among local residents and clients

Audit **Olfactometry** Design solutions de traitement Installation Commissioning Maintenance & After-sales servicing



## Recurring challenge in **Waste Water Treatment Plant**

Smelly gaseous emanations coming from pumping stations, storm-water basins, settling ponds, storage areas, sludge dehydration and drying areas

- Sulphurous compounds: hydrogen sulphide (H<sub>2</sub>S), mercaptans (R-SH),
- Nitrogen compounds: ammonia (NH<sub>3</sub>), amines (R-NH<sub>2</sub>)...
- VOC: aldehydes, ketones, fatty acids (R-COOH)

### Example of standard solution



Case of a WWTP at Macau – China (located in the middle of downtown): expansion of the odour treatment capabilities

- Airflow: 35 000 m<sup>3</sup>/h
- Pollutants: H<sub>2</sub>S, C<sub>8</sub>H<sub>8</sub>, NH<sub>3</sub>, CS<sub>2</sub>, DMS, DMDS, CH<sub>4</sub>S, CH<sub>3</sub>-SH

### Our solution

- Mineral biotrickling filter
- Radial demister & Electrical cabinet
- 2 activated carbon filters
- 2 high pressure centrifugal fans equipped with muffler and acoustic chamber
- Monitoring system for H<sub>2</sub>S: inflow & outflow

**Performance > 99%**

## Recurring challenge in **Domestic Wastes Treatment Plans**

- Smelly discharges from sorting areas, storage areas, and from the drying/fermentation process
- Pollutants: sulphure, nitrogen, chlorine, VOC and alcohols

### Example of standard solution



Case of a composting units of household and green organic sludge (France)

- Airflow: 19 000 m<sup>3</sup>/h
- Pollutants: NH<sub>3</sub>, COV, H<sub>2</sub>S

### Our solution

- Packing scrubber to treat NH<sub>3</sub> with acid injection control system
- Organic biofilter
- Piping network of fermentation hall
- Centrifugal fans for air intakes and exhausts

**Performance > 80%**



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