



Customer: Nestlé Purina
Website: www.purina.com
Customer size: 255 Employees
Country or region: Wroclaw,
Poland
Industry: Pet food manufacturing

Customer Profile

Nestlé Purina is the leading pet food manufacturer globally in sales, volume and market share. It has headquarters in the US, Switzerland and Australia, employs more than 15 000 staff, is present in 52 countries across all continents and operates 40 factories.

System Description

- Application
 - Malodour from pet food manufacturing
- Condition
 - 7500 m³/h process gas flow
 - High concentration of Mercaptans, NH₃ and VOCs. Odor level of 13 842 OU/s at inlet
- Solution
 - ColdOx™ + polishing through carbon bed
- Result
 - 50 OU/s after treatment
 - 99,6 % odour removal

For more information about our references, please visit:

www.centriair.com

Nestlé Purina implements ColdOx™ to abate airborne emissions from waste water treatment from pet food manufacturing.

"We installed the ColdOx™ system in one of our plants in the UK already in 2002. The system has proven to perform over time with minimal maintenance, so it was natural to continue with this technology in our new plant in Wroclaw. The system allows us to drastically reduce airborne emissions from our waste water treatment plant, including odour which was our main concern"

David Goodwind, Nestlé UK

To eliminate potential nuisance from malodour from its pet food manufacturing, Nestlé Purina invested in ColdOx™. The system effectively eliminates almost all odour emissions at significantly lower energy use compared to thermal oxidation.

Business need

Nestlé Purina is a leading pet food manufacturer. In 2015, the company opened its first factory in Poland. A waste water treatment plant was built to treat waste streams from the manufacturing. In the plant, gaseous compounds and malodours are formed and evacuated through the ventilation system, causing emissions of organic compounds and malodour to the external environment. To comply with directives and eliminate potential nuisance to neighbouring residential areas, the company installed a ColdOx™ system.

Solution

Based on extensive operational data from ColdOx™ at Nestlé Purina's UK plant, the company decided to implement the same system in the Wroclaw plant. The ColdOx™ system is based on oxidation of volatile organic compounds through the use of high intensity UV, excess

ozone, and photo chemical oxidation supported by special purpose catalysts. The system achieves oxidation rates of up to 98% which is comparable to thermal oxidation but does so at ambient temperatures and with minimum energy requirement.

Benefits

Through ColdOx™, Nestlé Purina has been able to minimize airborne emissions and odour from its Wroclaw plant while significantly reducing energy consumption compared to thermal oxidation. The system has effectively eliminated any nuisance from malodours caused by manufacturing process. Energy savings compared to thermal oxidation amounts to 3,8 GWh or 152 000 EUR per year. Nestlé is now considering to roll out ColdOx™ to its other pet food plants.

