

## 50% less precipitant - 100% reliability and cooperation

### Wastewater treatment in Wasmuël



Wasmuël is the second largest wastewater treatment plant in the Wallonian region, following close behind the Liège-Oupeye wastewater treatment plant. It was built in 1973, comprises a total area of roughly 100,000 square meters and processes a capacity of 250,000 inhabitant units. Roughly 140 employees work in distributed locations under the leadership of Mr. Pascal Capiou. They operate and maintain 30 wastewater treatment plants (from 200 to 250,000 IUs) and 120 pump stations in the IDEA region. The Wasmuël laboratory performs all analyses for the 30 wastewater treatment plants that are managed by IDEA.

*„Thanks to the orthophosphate analyzers, consumption of the iron(III) chloride precipitant could be reduced by more than 50 %.”*

Pierre Bronchart  
Chemical Engineer  
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Pierre Bronchart,  
Chemical Engineer



Wastewater treatment plant in Wasmuël in Belgium

**In many areas of work, the demands on quality are constantly increasing. This is also the case in the field of wastewater treatment. The limit values are regularly analyzed and reviewed. The IDEA (Intercommunale de Développement Economique et d'Aménagement du Coeur du Hainaut) in Belgium also supports this approach in order to create optimal conditions for wastewater treatment and thus guarantee the safety of the inhabitants of Wallonia.**

#### Challenge

IDEA focuses on long-term development goals to comply with increasingly strict requirements. The limits and the approvals stipulated by the Code de l'Eau are the main criteria for wastewater treatment. To shape this development over the years, it is important to have business partners who also have decades of know-how and are a stable sparring partner.

#### Cooperation and technical solution hand in hand

Endress+Hauser acts as such a sparring partner and helps IDEA at the Wasmuël wastewater treatment plant to constantly meet the requirements and drive forward the development of the plant. Thus, the IDEA team appreciates the openness, fast response time and professionalism of their contacts at Endress+Hauser, and continuity and a trusting cooperation are created.

Oxygen sensors, turbidity sensors, transmitters, flow meters, samplers and orthophosphate analyzers from Endress+Hauser are used in the wastewater treatment plant. The orthophosphate analyzers are used in the aeration basin and in the outlet to reliably maintain the legally prescribed effluent value of 1 mg/l Pges and at the same time to reduce the consumption of the precipitant iron(III) chloride (FeCl<sub>3</sub>).



Endress+Hauser experts support the IDEA team by providing training on the orthophosphate analyzer

After four years of operation, the success of online measurement is clear: The  $\text{FeCl}_3$  consumption was reduced by more than 50 %, which allows for considerable cost savings and is especially beneficial because the price for iron(III) chloride has increased significantly over the last year. The Walloonian team is also satisfied with the analyzer's maintenance effort. It amounts to just 3 hours per month and is very easy to plan. In addition, the customers can carry out the maintenance themselves, as they have been trained in detail by Endress+Hauser during commissioning. Furthermore, the online values of the orthophosphate analyzers can be used to further advance the automation of the wastewater treatment plant. In this way, IDEA can continuously pursue its development goals with the help of Endress+Hauser equipment.



Orthophosphate analyzer Liquiline System CA80PH reduces costs for operators by 50%.

#### All benefits at a glance

- Cost savings through the reduction of precipitant by 50%
- Continuous monitoring of development targets through close cooperation with Endress+Hauser
- Reduced maintenance effort
- Independent maintenance through intensive training by Endress+Hauser experts

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