Apa Canal Sibiu Solved Odour Complaints with Oizom's Real-time Odour Monitor

INTRODUCTION: *Odour Complaints Disrupting Public Trust in Wastewater Operations*

Apa Canal Sibiu S.A. plays a central role in managing the water supply and wastewater treatment infrastructure across Sibiu County and surrounding regions. Serving over 200,000 residents, the Mohu Wastewater Treatment Plant is a crucial part of this network. Located near the Cibin River, this facility treats both municipal and industrial wastewater before releasing it safely back into the environment.

Despite its technical capabilities and ongoing modernization, the plant faced growing scrutiny from nearby communities. Residents consistently reported foul smells they believed originated from the treatment process. These complaints not only raised public concerns but also triggered environmental reviews and pressure from local authorities. To address these challenges, Apa Canal Sibiu connected to Klarwin and selected Oizom's Odosense Custom system for continuous air monitoring. With advanced gas sensors and full integration with Envizom software, the solution enabled real-time detection of odour-related pollutants and facilitated fact-based communication with stakeholders.

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THE CHALLENGE: *Tracing Odours in a Complex Environmental Setting*

With odour complaints rising and media attention increasing, the management team faced multiple challenges:

1. **Persistent Public Complaints:** Residents frequently reported unpleasant odours, which affected the plant's relationship with the community and put pressure on regulatory bodies to intervene.
2. **Lack of Evidence to Validate Claims:** Without objective air quality data, it was difficult for the operator to validate or disprove the complaints. The absence of real-time monitoring meant they were often reactive rather than proactive.
3. **Environmental Audit Requirements:** The Romanian Environmental Guard requires reliable data on pollutant levels, particularly for gases commonly associated with wastewater treatment.
4. **Uncertainty About Odour Sources:** They were unable to detect the exact source, whether it was the treatment process or nearby agricultural activity was the true source of odours.
5. **Operational Limitations:** Staff lacked the tools to track gas concentrations across different time intervals or understand the influence of meteorological factors on pollutant dispersion.

Apa Canal Sibiu needed a monitoring solution that would be both technically capable and operationally simple, offering clear insights without adding complexity to day-to-day processes.

THE SOLUTION: *Odosense Custom with Envizom for Reliable Odour Monitoring*

To tackle the odour issue with precision, Apa Canal Sibiu installed Oizom's Odosense Custom air quality monitor, facilitated by Klarwin. The device was specifically chosen for its ability to detect gases typically linked to wastewater odours and for its robust weatherproof design suitable for outdoor deployment.

Key Technical Features of the devices are:

1. **High Sensitivity Sensors:** Designed to detect even low levels of odour-causing gases such as SO_2, H_2S, NH_3, Cl_2, along with Temperature, humidity, atmospheric pressure, Wind speed, and direction with high accuracy.
2. **Continuous Real-time Data:** Enables 24/7 tracking, removing the guesswork from air quality assessments.
3. **Data Integration with Envizom:** Allows environmental managers to access visual dashboards, track pollutant trends, and generate automated compliance reports.
4. **Pinpoint Emission Sources:** Helps identify the sources

INSTALLATION DETAILS

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of pollutants by linking gas concentrations with real-time wind direction and speed.
5. **Remote Monitoring:** Site managers and regulators can access the data anytime from any location, reducing the need for on-site inspections.

This system ensured that any rise in odour-related gases could be detected immediately and linked to specific time slots and environmental conditions.

THE TRANSFORMATION: *From Perception to Data-Backed Operations*
Following the deployment, Apa Canal Sibiu achieved a marked shift in how air quality issues were understood and addressed within the organization and the community.

1. **Reduced False Accusations:** Wind and pollutant data often indicated that the odours were not from the treatment plant but potentially from agricultural operations nearby. This helped reduce the number of unjustified complaints.
2. **Enhanced Decision-Making:** Staff could now monitor gas concentrations and environmental conditions in real time, making it easier to identify operational triggers and adjust processes accordingly.
3. **Faster Incident Response:** Instant alerts via Envizom allowed teams to act quickly if thresholds were exceeded, preventing escalation.
4. **Stronger Compliance Reporting:** Reliable data enabled better engagement with regulators, minimizing the risk of penalties and demonstrating proactive environmental management.
5. **Greater Internal Transparency:** The system helped multiple departments align by giving them access to the same verified data, from field technicians to senior management.

BROADER IMPACT: *Setting Standards for Municipal Odour Management*
Apa Canal Sibiu's decision to install Oizom's Odosense Custom and integrate it with Envizom reflects its commitment to sustainable operations and community well-being.

1. **Community Confidence Restored:** Residents appreciated the transparency and responsiveness, reducing the social pressure on the utility.
2. **Improved Public Perception:** Communicating data-backed insights helped reshape how the plant was viewed by the local population.
3. **Regulatory Assurance:** With consistent data collection and reporting, the plant now maintains better readiness for environmental audits.

The success of this project opens up possibilities for similar systems across other treatment facilities or pollution-prone zones.

CONCLUSION:Apa Canal Sibiu uses Oizom to Strengthen Environmental Accountability

With rising community expectations and regulatory pressure, Apa Canal Sibiu S.A. made a decisive move by adopting Oizom's Odosense Custom. This advanced air quality monitoring system, paired with Envizom software, provided clear, continuous visibility into odour-related emissions.

The installation transformed operations from reactive to proactive, empowered on-site teams with accurate data, and helped protect the plant's public reputation. More importantly, it enabled the utility to back its environmental claims with hard data, setting a precedent for transparency and accountability in the public utility sector. Apa Canal Sibiu continues to lead by example, showing how smart environmental monitoring can enhance both operational performance and public trust.

Oizom is a company specializing in environmental monitoring solutions. They offer products to monitor air quality, weather conditions, and other environmental factors. Utilizing advanced sensor technology and data analytics, Oizom aims to provide actionable insights for construction, industrial compliance, and community awareness. Their solutions can be applied in various sectors including government, industries, and community initiatives.