iLotusLand, and its Partners in Improving the Wastewater Monitoring Works in Thuan An Waste Water Treatment Plant, Binh Duong Province

TIME
2022

LOCATION
Binh Duong province - VietNam

CLIENT
BIWASE

ABOUT THE CLIENT

The Thuan An wastewater treatment plant in Southern Binh Duong province, Phase 2, has been operated by Biwase, since 2017 with a capacity of 17,000m³/day. Currently, the plant is operating at 56-59% of its designed capacity. The project includes the construction of 10 lifting and transfer pump stations, along with a pipeline network consisting of 29km of primary pipes, 82km of secondary pipes, 195km of tertiary pipes, and 3.6km of pressure pipes. The project has a total investment of VND 6,399 billion, with 85% funded by Japan (JICA) and 15% from domestic counterpart funds.
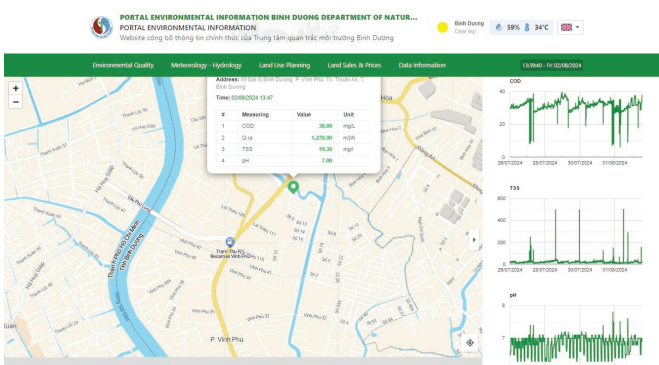

THE CHALLENGE

Monitoring the inlet and outlet discharge of wastewater is a mandatory aspect of WWTP operations. This process ensures that the treated discharge meets regulatory standards and safeguards the health of the surrounding communities. Additionally, operators are required to transmit the data to provincial authorities and can view the data remotely for supervision and compliance purposes.

THE SOLUTION

To assist the Thuan An Wastewater Treatment Plant, our partner Viet An Enviro teamed up with Kobelco Eco Solutions to supply measurement instruments for key parameters like COD, TSS, pH, and flow. The collected data is mandated to be gathered by the Binh Duong Center of Natural Resources and Environmental Technical – Monitoring. This data is then made accessible on the iLotusLand platform, which authorities use to remotely monitor all emission sources in the Binh Duong region.

Application	Wastewater Monitoring
Number of stations	1
Measured parameters	COD, TSS, pH, Flow
Instrument models	**Endress Hauser:** - Oxymax W COS51D + Liquiline CM442 - Turbimax CUS51D + Liquiline CM442 - Deltabar S FMD77 - Micropilot FMR54 + Remote Display FHX50 - Promag 50W1F, DN150 6" - Promag 50W1h, DN100 4"
Datalogger model	Envidata 1801
Software model	iLotusLand Platform for Environment (On-Cloud)

THE RESULT

After installing the instruments, the Thuan An Wastewater Treatment Plant experienced significant improvements in its monitoring capabilities. The real-time data collection for parameters became more accurate and consistent. This enhanced data quality allowed for better compliance with environmental standards and more efficient operation of the treatment process. Additionally, the seamless integration with the iLotusLand platform enabled authorities to monitor emissions remotely, ensuring timely responses to any potential issues and contributing to improved environmental management across the Binh Duong region

> "iLotusLand is an environmental IoT company offering data-driven environmental monitoring solutions for better decision-making. With our plug-and-play stations, we monitor a wide range of parameters in Wastewater, Surface Water, Groundwater, Drinking Water, CEMS, AAQMS, etc. And iLotusLand data analytics platform delivers actionable insights for government, industries, and communities. Our commitment is to be a key player in fostering a sustainable future through intelligent environmental monitoring solutions and data science."