

Monitoring odour levels in Dubai's Waste Water Treatment Plant

Our Client

The Al- Alweer Sewage Treatment plant is one of the 2 Municipal Water and sewage treatment plants in Dubai. It is situated in Warisan, which is 25km away from the city of Dubai. The plant acts as an essential sanitary bracket in performing both tertiary wastewater treatment for irrigation and sludge treatment for reuse as a soil fertilizer. The plant has an impressive capacity of holding 260,000 cubic meters of both domestic wastewater and seepage from the city and nearby industries and towns.



The Challenge

Wastewater treatment plants are known for emitting high amounts of ammonia, H_2S , NH_3 , CH_4 , and CH_2O which are major causes for causing odour in and around the area. The Dubai Municipality did not have an odour monitoring system that could detect the parameter levels of such harmful gases. They needed a customizable sensor-based air quality monitoring system that provided room for adding new air pollutant sensors in the future if and when needed. The Dubai Municipality needed an air quality monitoring system that could also act as an instrument to send data through a unique IP address and port so that their data remains protected.

Installation Details

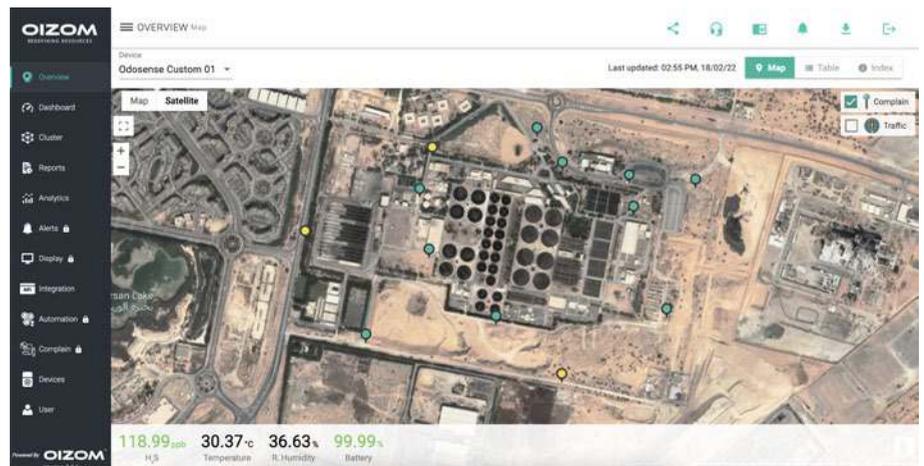
12 units of Odosense were installed in the Al-Alweer Sewage Treatment Plant, Dubai

1 unit of Weathercom was installed in the Al-Alweer Sewage Treatment Plant, Dubai



The Solution

Oizom with Tridel Technologies Group offered 12 units of Odosense and one unit of Weathercom to the Dubai Municipality to install in the Al-Alweer Sewage Treatment plant for monitoring odour and other hazardous pollutants levels. Odosense has the capacity to monitor SO₂, H₂S, NH₃, and can be customised to add up to 9 sensors for monitoring other harmful air pollutants as and when required. Weathercom can monitor Temperature, Humidity, and other meteorological parameters which are helpful in forecasting the weather conditions for the authorities and workers. Odosense is also capable of sending the data collected directly to third party devices of the government for displaying the data through a unique IP address and port.



The Result

Oizom's odosense has helped the Dubai municipality get an accurate and real-time reading of the Al-Alweer Sewage Plant's gaseous emissions and air pollutants. Easier access to the historical data of the trends and patterns of plant emissions is now established. This has enabled the authorities to adopt appropriate measures that safeguard their employees' health. Oizom's devices have IP66 enclosure that has successfully endured the harsh weather conditions and has contributed to ensuring the safety and security standards of the Al-Alweer Sewage Treatment plant.

“Oizom's devices have established accurate historical data of the odour and gaseous emissions. They are easy to use and are helpful in mitigating emission problems and safeguarding the workers' health.”-
Shefeek .A, General Manager-Tridel Technologies

Oizom is an environmental IoT company offering data-driven environmental solutions for better decision making. With our sensor-based hardware, we monitor various environmental parameters like air quality, noise, odour, radiation, weather conditions, etc. Our data analytics platform derives many actionable insights for authorities, communities, and industries. Oizom strives to play an essential role in a sustainable future through smart environmental solutions and data science.