

# Odour and air quality monitoring in Richards Bay Coal Terminal

## *Our Client*

Richards Bay Coal Terminal (RBCT) is the largest coal export terminal in Africa. It has an impressive capacity of 91 million tonnes per year and is responsible for providing coal to major economies across the world. It is situated in Richards Bay Port, which is home to more than 319,000 people. In addition to its busy seaport, the Port of Richards Bay is home to two aluminium smelters and a fertilizer plant.



*Images are representative*

## *The Challenge*

Thousands of workers and residents near the Richards Bay Coal Terminal were exposed to constant pollutants from the Fertilizer plant nearby. Fertiliser industries emit major air pollutants such as  $\text{NH}_3$ , oxides of nitrogen, sulphur, ammonia, and  $\text{CO}_2$ . The Richards Bay Coal Terminal did not have a comprehensive and reliable odour and air quality monitoring system that could alert them about gas leaks. The authorities wanted a comprehensive air quality monitoring system to map gases, odours, and dust pollutants. This could help them ensure safe standards of air for their workers and the residents nearby.

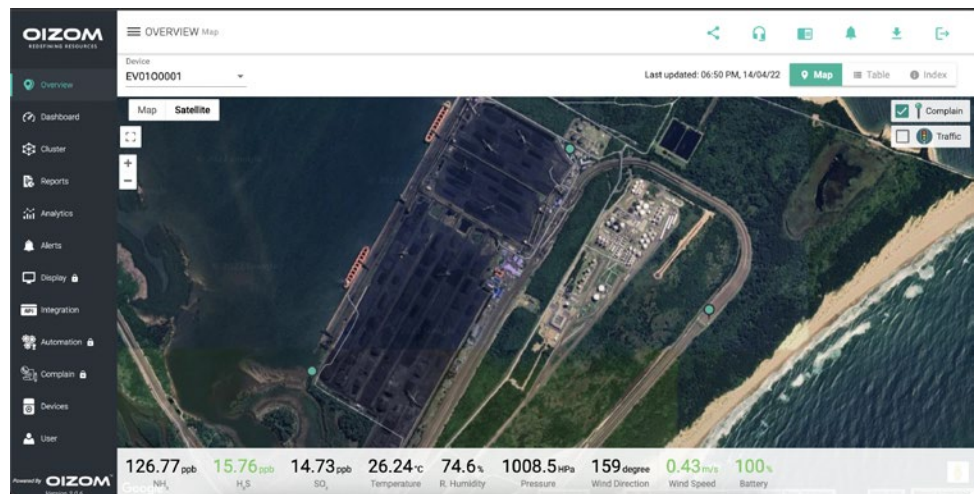
## Installation Details

3 units of Odosense are installed around the RBCT area.

1 unit of Polludrone Smart is installed in the vicinity of the RBCT area.

## The Solution

Oizom offered 3 units of Odosense and 1 unit of Polludrone Smart to the Richards Bay Terminal. It was the need of the hour to adopt a comprehensive air quality monitoring system. Both Odosense and Polludrone are compact solutions for monitoring odour, hazardous gaseous levels, temperature, UV light, humidity, and every other parameter for monitoring the Air Quality Index. They come equipped with a robust body, data accurate features, and a wide range of communication protocols to choose from so that the authorities can be immediately notified of any discrepancy in the air quality.



## The Result

Richards Bay Coal mines Terminal can now ensure clean air to its workers, and neighbours. This has further optimised their hygiene standards. Additionally, accurate air quality data from both Odosense and Polludrone can be used by decision-makers for strategic planning that help them make infrastructural changes to achieve standards as laid out by South Africa's Air Quality Act 2004 (No. 39 of 2004). Real-time air quality monitoring has also made it easier for the authorities to notify people in case of any leakage of hazardous gases.

“Oizom has provided exceptional services in environmental monitoring. The real-time air monitoring capabilities have been useful in many ways. Timely support and assistance were given.” - Howard Palmer, Director, Envirocon Instrumentation

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.