

Monitoring Swati 18 Construction Site with Data-Driven Air Quality Monitoring



INTRODUCTION: Elevating Innovation with Environmental Responsibility

Swati 18, an architectural landmark rising above the bustling streets of Ahmedabad, isn't just redefining skylines—it's reshaping how construction sites can integrate sustainability. Amidst a high-traffic urban zone, dust emissions threatened air quality, prompting Swati 18 to pioneer a data-driven approach to cleaner air. Recognizing the environmental challenges posed by construction activities, especially in a high-footfall area. Swati 18 took a proactive approach to air quality management. On January 17, 2025, the site deployed Oizom's AQBot PM, ensuring compliance with Ahmedabad Municipal Corporation (AMC) guidelines and reinforcing its responsibility towards community well-being.



THE CHALLENGE: Ensuring Air Quality Compliance Amidst Urban Development

As construction progressed, Swati 18 faced several environmental challenges that required immediate attention:

- 1. Dust Emission Compliance:** Adhering to AMC's air quality norms for PM2.5 and PM10 was crucial to avoid regulatory penalties.
- 2. Public Health Concerns:** The site's close proximity to Palladium Mall heightened the risk of airborne dust affecting visitors and nearby residents.

- Operational Efficiency:** The project required an easy-to-install and low-maintenance air monitoring solution that would seamlessly integrate into the construction workflow.

With the construction site being a major source of particulate pollution, real-time monitoring was necessary to ensure transparency, proactive dust control, and compliance with environmental standards.

THE SOLUTION: AQBot PM by Oizom

To address these challenges, Swati 18 installed Oizom's AQBot PM, an advanced air quality monitoring device designed for continuous particulate matter measurement. The solution provided key advantages:

- High-Precision Dust Monitoring:** Real-time measurement of PM2.5 and PM10 enabled accurate tracking of dust levels.
- Compact and Easy Deployment:** The plug-and-play design of AQBot PM allows quick and hassle-free installation. Minimal maintenance requirements made it a cost-effective and reliable long-term solution.
- Public Hotspot Air Quality Monitoring:** With real-time monitoring near Palladium Mall, Swati 18 proactively identified peak dust hours, allowing on-the-spot suppression actions, such as misting systems and optimized work schedules.
- AMC Compliance and Regulatory Reporting:** The Enviozm's data reporting ensured timely submissions to AMC, preventing potential violations. Advanced analytics provided insights into peak dust levels, allowing for proactive mitigation strategies.

Oizom's AQBot PM, trusted across Ahmedabad with over 50 deployments, was the preferred choice due to its superior sensor accuracy, IoT-enabled alerts, and proven track record in regulatory compliance monitoring. Having built strong trust in our product, they contacted us directly to ensure compliance with AMC's environmental guidelines.



INSTALLATION DETAILS

**1 UNIT of
AQBOT PM**

THE TRANSFORMATION: Data-Driven Environmental Management

The deployment of AQBot PM led to significant improvements in Swati 18's environmental sustainability approach:

- Regulatory Compliance Achieved:** By continuously monitoring PM2.5 and PM10 levels,

Swati 18 successfully aligned with AMC's dust control regulations, reducing risks of fines and enhancing transparency.

- 2. Improved Environmental Responsibility:** Access to real-time air quality data enabled the construction team to implement dust control measures such as water spraying and work rescheduling, resulting in lower particulate dispersion in surrounding areas.
- 3. Enhanced Community Well-being:** With AQBot PM safeguarding air quality, the exposure to construction-related dust at Palladium Mall and nearby residential areas was significantly minimized. This proactive approach positioned Swati 18 as a socially responsible real estate entity.
- 4. Data-Driven Decision Making:** Envizom's regular report on PM helped them optimize construction schedules, prioritizing dust-intensive tasks during low public activity hours. Insights from air quality trends enabled better allocation of dust suppression resources, reducing overall environmental impact.
- 5. Positive Stakeholder Perception:** The initiative was well-received by local authorities, businesses, and the public, reinforcing Swati 18's commitment to sustainable urban development.

By integrating advanced environmental monitoring technology, Swati 18 set a benchmark for responsible construction practices in Ahmedabad.

BROADER IMPACT: A Model for Sustainable Construction

Swati 18's proactive approach to air quality monitoring sets a precedent for the real estate industry. By leveraging Oizom's AQBot PM, the project has demonstrated how integrating smart environmental solutions can balance growth with sustainability. This initiative ensures compliance and fosters a healthier, more livable urban environment.

CONCLUSION: Pioneering Cleaner Air in Urban Development

Swati 18's initiative underscores a simple yet powerful truth: Clean air should be a standard, not a luxury. The project has successfully reduced its environmental footprint while ensuring compliance and public well-being. By integrating smart air quality solutions, construction firms can future-proof developments while prioritizing environmental responsibility.

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.