

# Prakriti Space LLP Deploys Aqbot PM to Ensure Compliance With Real-time Monitoring



## **INTRODUCTION: Harnessing Reliable Dust Monitoring for Construction Compliance**

In today's regulatory environment, air quality compliance at urban construction sites is more essential than ever. Prakriti Space LLP, a leading developer, faced growing regulatory scrutiny when the Maharashtra Pollution Control Board (MPCB) issued a notice due to the absence of dust level monitoring, putting their ongoing operations at risk.

Rather than seeing this as a setback, Prakriti Space LLP viewed it as an opportunity to enhance its environmental responsibility and operational efficiency. They partnered with Oizom and deployed the AQBot PM, a smart particulate monitoring device, seamlessly integrated with the powerful Envizom platform.

This strategic move enabled real-time, actionable insights into air quality, ensured full regulatory compliance, and safeguarded uninterrupted site operations. What started as a compliance challenge quickly transformed into a model of proactive environmental management, turning a potential risk into a lasting strength.



PRAKRITI SPACE LLP

## **THE CHALLENGE: Overcoming Critical Air Quality Obstacles**

Before adopting Oizom's solution, Prakriti Space LLP contended with a mix of regulatory and site-specific hurdles:

- 1. Lack of Real-Time Dust Data:** The absence of continuous PM monitoring made it impossible to track dust peaks or ensure compliance for PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, and PM<sub>100</sub>.
- 2. Regulatory Pressure:** Without a robust air quality monitoring system, the construction site came under scrutiny from environmental authorities.
- 3. Exposure to Financial Penalties:** The absence of continuous and auditable dust data increased the risk of non-compliance, potentially leading to significant fines and construction delays that threatened both the budget and timelines.
- 4. Limitations of Manual Monitoring:** The lack of real-time insights made it challenging to detect pollution spikes or take timely corrective action, leaving the site vulnerable to unmonitored environmental impacts.
- 5. Uncertainty in Operational Decisions:** Lacking robust data, managers couldn't plan or defend site operations during regulatory reviews.
- 6. Worker and Community Safety Concerns:** High, undetected particulate levels put workers and the surrounding neighborhood at increased exposure risk.

The project faced mounting legal exposure, operational inefficiencies, and community safety concerns, necessitating a future-ready monitoring upgrade.

## **THE SOLUTION: Smart Dust Management with AQBot PM**

To address the pollution and mitigate effectively, Technovalue Solutions Pvt Ltd. installed Oizom's AQBot PM alongside Envizom software at Prakriti Space LLP's site for the following features :

- 1. Comprehensive Dust Monitoring:** AQBot PM's laser scattering technology accurately tracks PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, and PM<sub>100</sub> in real-time.
- 2. Rugged & Reliable Hardware:** Enclosed in IP66/NEMA 4X composite housing to ensure uninterrupted monitoring in harsh construction conditions.
- 3. Versatile Communication:** Multiple options (Ethernet, GSM, WiFi, LoRa, Sigfox, LTE, NB-IoT) ensure continuous data transfer to Envizom and central control centers.
- 4. Real-Time Alerts:** Envizom issues instant, threshold-based alarms so site teams can react before regulatory limits are breached.
- 5. Automated Compliance Reporting:** Envizom autogenerates and stores time-stamped reports, ready for audits and regulatory submissions.
- 6. Easy Dashboard & Analytics:** Project leaders access a



**INSTALLATION  
DETAILS**

**1 UNIT  
of  
AQBOT PM**

live dashboard for micro-analysis, historical trends, and actionable insights, improving both day-to-day and strategic decision-making.

This powerful integration turned dust compliance from a regulatory burden into a streamlined part of PRAKRITI SPACE's operational workflow.

### ***THE TRANSFORMATION: Making Compliance and Operations Future-Ready***

The outcome of the Oizom deployment was immediate and tangible, reshaping both compliance and site management:

- 1. Regulatory Readiness:** Continuous, auditable PM data kept the site always ready for unannounced inspections, eliminating last-minute compliance scrambles.
- 2. Site Continuity Secured:** By monitoring and documenting dust levels, site closures due to non-compliance were averted.
- 3. Penalty Avoidance:** Real-time detection and smart alerts allowed rapid mitigation, preventing costly fines and work stoppages.
- 4. Proactive Worker & Community Safety:** Timely alarms and clear trends safeguarded worker health and reassured local stakeholders.
- 5. Data-Driven Decision-Making:** Operations and planning, such as altering work schedules or dust mitigation, were guided by reliable on-site data instead of assumptions.
- 6. Enhanced Communication:** Automated digital reports and dashboards ensured all stakeholders, from site managers to compliance officers, had access to up-to-date environmental metrics.

In essence, Prakriti Space LLP transitioned from reactive compliance to proactive environmental management, boosting productivity and site reputation.

### ***BROADER IMPACT: Leading Sustainable Development with Smart Technology***

Prakriti Space LLP's adoption of Oizom's advanced air quality monitoring technology marks a significant step toward setting new standards in sustainable infrastructure management in Pune. By embracing a solution that prioritizes environmental responsibility and transparent regulatory compliance, the company demonstrates its commitment to responsible urban development and long-term sustainability.

The integration of real-time, verifiable dust and air quality monitoring not only ensures proactive mitigation but also builds confidence among stakeholders and regulatory bodies through data-driven transparency. Furthermore, the scalable and future-ready nature of the Oizom system enables Prakriti Space LLP to seamlessly adapt to evolving environmental regulations, solidifying its position as a forward-thinking leader in sustainable urban growth.

## **CONCLUSION: Setting a Sustainability Benchmark with Oizom**

Prakriti Space LLP's implementation of Oizom's AQBot PM and the Envizom platform has set a new benchmark for compliant and sustainable construction practices in Pune. By transitioning from manual, error-prone dust monitoring to a smart, automated system, the company successfully avoided regulatory penalties, ensured seamless site operations, and prioritized the health of both workers and the surrounding community.

With real-time air quality insights and intelligent automation, Oizom's solution addressed critical compliance needs while positioning Prakriti Space LLP as a forward-looking leader in responsible urban development. This strategic move not only resolved immediate challenges but also laid the foundation for smarter, safer, and more sustainable growth in the future.

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.