Monitoring noise levels at the mining site to meet regulations

Our Client

The Thakurani Ghoraburhani operations are located in the southeastern part of the Singhbhum-Keonjhar-Bonai iron ore belt, which runs through northern Odisha and southern Jharkhand in India. This area is part of a well-known iron ore region with many iron ore deposits. The iron ore in this area is mostly hematite, with small amounts of goethite, siderite, specularite, and limonite. While working at the Sagasahi mine, which produces high-quality iron ore, they faced significant challenges due to high noise levels. They needed a reliable noise monitoring device to monitor and manage the noise effectively.

The Challenge

The company faced a critical operational halt when the authority paused its mining activities at the Thakurani Ghoraburhani Mine due to non-compliance with noise regulations. This non-compliance led to significant consequences, impacting both the company and the local community that relied on the mine for their livelihoods. Noise pollution is a common issue in mining operations. To address this issue and comply with government regulations, the company required a device capable of real-time noise data monitoring and immediate alerts when noise levels exceeded the threshold limit.

The Solution

To ensure continuous monitoring of noise levels on the site and compliance with regulations, our partner Enuvos Solution offered AQBot noise monitoring system to the Thakurani Ghoraburhani. This device was selected for its accuracy, durability, and robustness, making it ideal for the challenging environmental conditions of mining operations. The AQBot's high-performance class-2 noise sensor accurately measures sound levels within specified parameter limits.

Additionally, the device has a user-friendly in-built display that presents data in an easily understandable format. This feature helps workers monitor noise levels effectively and pause their work whenever the limit is exceeded. For immediate alerts when noise levels exceed the threshold limit, the AQBot comes with a siren and a strobe light, ensuring prompt alerts to enhance safety and regulatory compliance.

Installation Details

1 Unit of
AQBot - Noise

The Result

The installation of the AQBot Noise Monitor at Thakurani Ghoraburhani Mine led to several positive outcomes. By providing real-time noise data, the device ensured regulatory compliance with the State Pollution Control Board (under sections 15/19 of the EPA, 1986). Continuous noise monitoring helped them address and resolve potential issues, optimize operations, and reduce regulatory risks proactively. The real-time data with regular alerts enabled informed decision-making regarding noise mitigation strategies and operational adjustments.

The noise data is easily accessible through the Envizom software, allowing site owners to visualize and analyze it from anywhere on their smart devices. Utilizing Envizom's alert module, Thakurani Ghoraburhani customized the threshold limit, enabling them to receive alerts and notifications whenever exceeded. This feature ensured timely action and necessary precautions, enhancing operational efficiency and regulatory compliance.

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.