

Case Study

Project Title

Dedicated Technical Support for SPARING Operations and Maintenance – PT Vale Indonesia

Project Snapshot

Client: PT Vale Indonesia | **Location:** Kolaka Regency, South East Sulawesi Province

Sector: Nickel Mining | **Periode / status:** 2025 - now

Ganeca Services: Managed Environmental Operations – Dedicated Engineer Support for SPARING Operation

Project Overview

As part of the effort to ensure the reliability of the continuous wastewater quality monitoring system, Ganeca Environmental Services provides dedicated engineering support to PT Vale Indonesia for the operation and maintenance of the Continuous and Online Wastewater Quality Monitoring System (SPARING). This dedicated engineer encompasses daily SPARING operations, real-time device and sensor condition monitoring, preventive and corrective maintenance, troubleshooting, as well as monitoring data continuity and quality transmitted through the system.

The Challenge

Operating SPARING in a mining environment requires high device reliability, uninterrupted data continuity, and rapid response to system disturbances. The system consists of various interconnected components, including water quality sensors, data acquisition devices, communication/telemetry systems, and monitoring platforms. Dynamic site conditions present several operational challenges, such as sensor drift or fouling, communication downtime, reading anomalies, and auxiliary power issues. These issues must be promptly identified and resolved to minimize data loss and maintain continuous monitoring. Beyond technical tasks, structured data management, thorough maintenance documentation, and multi-stakeholder technical coordination are required to handle any disruption systematically.

Our Solution

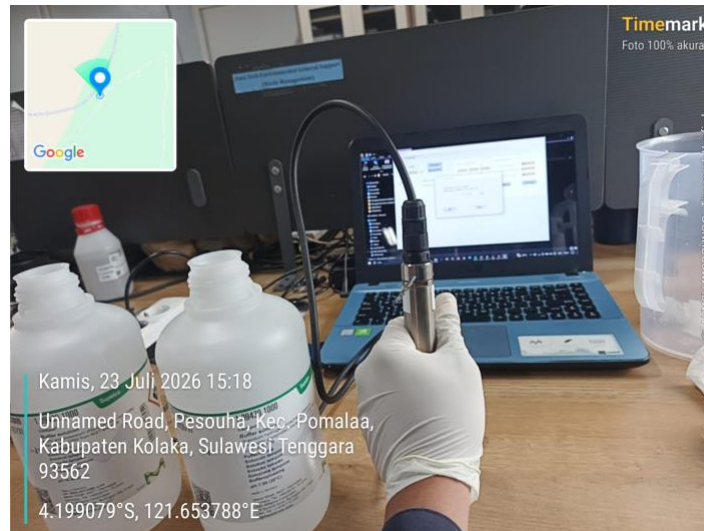
Ganeca deploys dedicated engineers who are fully integrated with PT Vale Indonesia's operational team to support continuous SPARING O&M. Through this dedicated engineering approach, real-time monitoring, routine maintenance, emergency troubleshooting, data management, and technical coordination are executed in an integrated and responsive manner. Furthermore, Ganeca supports SPARING data management and operational documentation via GanecaLink, an integrated environmental platform accessible through GanecaHub.

Results & Value

Dedicated engineer support adds value to SPARING operations by strengthening "Managed Environmental Operations" in a structured and sustainable manner. The presence of dedicated technicians on-site enables faster identification of system and data anomalies, allowing for the immediate coordination of troubleshooting and corrective maintenance. This approach also helps maintain sensors and supporting

equipment, ensuring they function in accordance with operational requirements. Through collaboration between dedicated technicians and PT Vale Indonesia's internal team, SPARING management becomes more reliable, responsive, and sustainable, while simultaneously supporting wastewater quality monitoring and sustainable environmental data management.

Project Photos



Layanan terkait: [Technology-Enabled Environmental Monitoring](#)