

Case Study

Project Title

Centralizing Real-Time Wastewater Monitoring Across 24 Points at PT Vale Indonesia

Project Snapshot

Klien: PT Vale Indonesia Tbk | **Lokasi:** Pomalaa and Bahodopi, Indonesia

Sektor: Nickel Mining and Processing | **Periode / status:** 2026 / Ongoing

Layanan Ganeca: Continuous and Online Wastewater Quality Monitoring System (SPARING), integrated with GanecaLink, including system maintenance and calibration.

Project Overview

PT Vale Indonesia Tbk requires a wastewater monitoring system capable of continuously collecting data across multiple monitoring points in its Pomalaa and Bahodopi operational areas. Ganeca Environmental Services implemented approximately 24 SPARING monitoring points and integrated them with GanecaLink, connecting data from distributed locations into a centralized digital platform for real-time monitoring and access.

The Challenge

PT Vale Indonesia Tbk wastewater monitoring points are distributed across two operational areas, comprising 21 monitoring points in Pomalaa and 3 points in Bahodopi. This distributed monitoring network requires a system capable of continuously collecting, transmitting, and presenting data from multiple locations in a centralized environment, enabling environmental teams to monitor the overall network more efficiently. In addition, continuous monitoring systems require regular maintenance and calibration to maintain equipment performance, system reliability, and data quality over time.

Our Solution

Ganeca implemented SPARING across approximately 24 wastewater monitoring points in Pomalaa and Bahodopi, supported by data acquisition and communication systems. Monitoring data from each location is transmitted and integrated into GanecaLink as a centralized monitoring platform. Through GanecaLink, PT Vale's environmental team can remotely access real-time and historical data, monitor multiple points through a single platform, and receive notifications and early warnings when monitored conditions require attention. Ganeca also provides regular maintenance and calibration to support the long-term reliability and performance of the monitoring system.

Results & Value

The implementation connects approximately 24 SPARING monitoring points across Pomalaa and Bahodopi through GanecaLink, giving PT Vale centralized visibility of wastewater conditions across its monitoring network. Real-time and historical data can be accessed remotely, supporting monitoring, evaluation, and more efficient identification of conditions requiring attention. The system also supports real-time data transmission to the KLH system, connecting field measurements, centralized monitoring, and environmental monitoring and reporting requirements within an integrated digital workflow.

Project Photos



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