

# How CTP Combined Biomobil® Tank and Aeromobil® to Ensure Continuous Wastewater Treatment for a Chemical Plant in Brazil (Activated sludge)

A leading chemical plant in Brazil faced a critical challenge in maintaining its existing biological wastewater treatment system. The plant needed a temporary yet efficient solution to replace its system while ensuring regulatory compliance and uninterrupted operations.

CTP Environment stepped in to design and implement a fully functional, temporary biological treatment system (activated sludge), allowing the plant to continue treating wastewater without interruption.



## The Challenge

The chemical plant's biological treatment system required maintenance, but shutting it down without a replacement would put compliance and operational efficiency at risk. The plant needed a temporary treatment solution that could:

- Bypass the existing system while keeping operations running
- Provide an activated sludge treatment to degrade organic matter effectively
- Be deployed quickly and meet stringent environmental and safety standards

With transportation and import restrictions creating logistical challenges, CTP had to ensure on-time delivery, installation and operation of the new system.

## The Solution

CTP designed and implemented a temporary activated sludge system that fully replaced the plant's existing biological treatment. The solution included:

- **Biomobil® Tank:** Containing cultivated microorganisms to degrade organic pollution through aeration and mixing
- **Aeromobil® for Clarification:** Ensuring treated water met discharge standards through flocculation and flotation processes
- **Full System Automation:** Utilities and control container with real-time monitoring, flow regulation and dosing systems

To ensure a seamless transition from the existing biological treatment system, CTP first performed a pilot test to evaluate performance and confirm that the system met the plant's treatment requirements. Once validated, CTP installed its Biomobil® Tank and Aeromobil® unit, bypassing the wastewater flow into them, allowing continuous operation without disruptions.

The process was enhanced with nitrification and denitrification in the Biomobil® Tank, optimizing treatment efficiency while maintaining compliance with environmental regulations. Despite logistical challenges, close collaboration between the client and the CTP team ensured smooth execution.

## The Results

CTP successfully provided a fully operational biological treatment system, allowing the plant to maintain wastewater treatment while its existing system was offline. After months of continuous operation, followed by a smooth decommissioning and dismantling process. CTP followed all safety protocols and completed the project with zero accidents or incidents.

By delivering a custom-engineered, temporary solution, CTP ensured compliance, operational continuity and seamless project execution for the chemical plant. If you are looking for a customized wastewater treatment solution, [contact CTP Environment today](https://www.ctpenvironment.com) to learn how our mobile treatment units can support your operations.