

# Refinery



# SAMCO

Separation from the ordinary

## PROJECT BRIEF

Major Water/Wastewater Treatment Facility Works with SAMCO to Test Efficiency of Biological Water Treatment

### PROJECT OVERVIEW

A major water/wastewater treatment facility in Alabama, US, required the development and execution of a demonstration facility to test the effectiveness of a specialty process for biologically treating highly contaminated industrial waste. The company worked with SAMCO to complete the pilot study.

### OBJECTIVE

Devise, build, and implement pilot study to show treatment effectiveness for biologically contaminated wastewater.

### SCOPE OF SERVICE

SAMCO delivered a detailed process, mechanical and electrical design and engineering, controls integration, system fabrication, and commissioning.

### CHALLENGES

- Highly contaminated industrial wastewater
- Biologically active waste
- High purity requirements for discharge and/or reuse

### SOLUTION

Working with the client to test the effectiveness of a specialty biological treatment of their industrial waste, SAMCO helped the client suss out an effective treatment for their biologically active waste. To ensure adequate purity requirements were met, SAMCO proposed, designed, built, and implemented a multifaceted treatment system that featured a conex box containing specialty bioreactors, auxiliary pumps, tanks, and filters for complete system integration. SAMCO also installed programmable logic controllers (PLC) to automate flow, temperature, pressure, and resistivity monitoring with an operator interface for ease of use.

### TECHNOLOGY

Project deliverables and equipment included:

- Bioreactors
- Auxiliary pumps
- Filters/Tanks
- PLC Controls

## OVERVIEW

**Industry**  
Refinery

**Location**  
Alabama, US

**Objective**  
Prove out specialty biological treatment of industrial wastewater

**Solution**  
2 GPM Mobile Specialty Bioreactor System

Looking to test treatment options? Is biologically contaminated wastewater an issue?  
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