

Chemical



SAMCO

Separation from the ordinary

PROJECT BRIEF

Leading Chemicals and Aerospace Manufacturer Utilizes Groundwater Treatment Plant to Meet NYSDEC/US EPA Wastewater Regulations

PROJECT OVERVIEW

When a leading chemicals and aerospace manufacturing company in New York State was challenged to meet stringent wastewater discharge guidelines, SAMCO helped the client succeed by delivering a modular groundwater treatment solution that cut project costs by 30% and delivery time by 50%.

OBJECTIVE

Bring discharge streams into compliance with NYSDEC and US EPA guidelines by removing complex and variable contaminants, including:

- Oil and grease
- Heavy metals
- Volatile and semi-volatile organic compounds (VOCs/SVOCs)

SCOPE OF SERVICE

Client time and budget constraints demanded a comprehensive turnkey solution, comprising concept design and engineering, system fabrication, field installation, and startup support for a groundwater treatment plant.

CHALLENGES

- Stringent discharge specifications
- Limited budget
- Tight compliance deadline

SOLUTION

SAMCO delivered a scalable groundwater treatment plant to help with the client's complex contaminant removal needs. The modular system was engineered with standard components, allowing for project completion in half the time, and at 30% below cost. With a capacity of 20 GPM, the plant handles variable groundwater treatment needs, including oil and grease removal, heavy metals precipitation, activated carbon absorption, clarification and filtration to suit NYSDEC and US EPA specifications. Additionally, the skid-mounted, enclosed solution automated operational demands by integrating PLC and SCADA systems to manage plant function and prepare automated regulatory reports based on process monitoring data.

TECHNOLOGY

Project deliverables and equipment included:

- Oil-water separator
- Reaction and equalization tanks
- Inclined plate clarifier
- Multimedia and activated carbon filters
- Sludge handling/filter press
- PLC/remote telemetry controls

OVERVIEW

Industry
Chemical

Location
New York, US

Objective
Implement scalable solution for groundwater treatment per stringent NYSDEC/US EPA limits

Solution
20 GPM Modular Groundwater Treatment Plant

Need help bringing your groundwater to industry compliance standards? Is water purity an issue? Contact us today at SamcoTech.com • askengineers@samcotech.com • (716) 743 9000