

## INDUSTRIAL WASTEWATER

# WWTP Design for The Wine Industry

Industry: Wine/Beverage  
System: 70 gpm Waste Water Treatment System Design  
Location: New York  
Goals: Remove Suspended Solids, BOD, COD

### Project Overview:

SAMCO's state-of-the-art Waste Water Treatment System process design at a leading company's Grape Crushing Plant & Winery utilizes Biological Treatment, Suspended Solids Flocculation, Clarification, Sludge Handling/Dewatering to treat wastewater and meet stringent discharge quality. It is also designed for variable and high influent BOD levels in a Wine/Beverage industry.

### Critical Issues:

Complex contaminants & varied flow	Stringent discharge limits
Plant expansion w/ added water & wastewater load	High sewer surcharge costs

### Vision for Solution:

- ◆ Pollution prevention (P2), waste minimization, recycle/reuse & source segregation strategies to reduce contaminant load on wastewater treatment plant, reduce chemical feed, reduce sludge waste and handle added expansion load
- ◆ Biological treatment in lieu of discharge to POTW, for maximized ROI
- ◆ Utilize our standard products & pre-packaged system design for fast-track turnkey project delivery and performance guarantee
- ◆ PLC controlled system for minimum operator attention
- ◆ Modular design with expansion capability for future needs

### Project Scope:

Detailed Plant Survey	P2 & Waste Minimization Studies
Treatability Studies	Onsite Pilot Studies
Concept Development	Process Design/Project Engineering
Project Estimation	

### Equipment Description:

Equalization Tanks	Influent Pumps
Chemical Feeds	Biological Packed Tower System
Sludge Recycle	Clarifier System
Sludge Handling	Filter Press
PLC Controls	Platforms/Stairs

### Special Features:

- ◆ Study sewer use ordinances, flow records, lab results, plant and POTW O&M records
- ◆ Engineering studies reduce 30% wastewater & 50% pollutant concentration
- ◆ PLC controlled system with Panel-View Operator Interface for system automation
- ◆ Process monitoring include flow, level, pressure, pH, dissolved oxygen, etc
- ◆ Biological packed tower system with sludge recycle for enhanced performance
- ◆ Design incorporates a modular expandability and future add-on capability for changing needs

