



Project Highlights

- Commissioned May, 2012
- Domestic WW, CAS Retrofit
- Permit(s); Discharge
- 10/1/2 (TN/TP/Turbidity)
- Municipal \Rightarrow Stream
- MMF Capacity: 0.75 MGD
- \$9.73/gal
- 1 FTE (Full-Time Employees)

One System, Many Solutions...



“One of the major advantages of ENVIROQUIP MBR Technology was the ability to expand the facility within the existing footprint. The other significant advantage lay in the improved effluent quality from the MBR.”

Project Overview

System Type(s):	Enviroquip [®] MBR
Previous Facility Type:	Trickling Filter, Sand Filters
Owner:	Village of Carrollton
Engineer:	CT Consultants
Contractor:	Stanley Miller
Operations:	Village of Carrollton
Delivery Method:	Pre-Selection
Time To Build:	18 months
Total Installed Project Cost:	\$7,300,000
Plant Contact Information:	Mike Leslie cwwater@frontier.com

Description

The Carrollton Wastewater Treatment Plant located in eastern Ohio, was upgraded from conventional activated sludge technology.

After detailed investigations that included site visits to operational facilities to fully understand plant operations, The City of Carrollton indicated that MBR technology was the best option for this application.



Plant Design Information

Fine Screen Type:	Band Screen
Aperture or Slot Size:	2 mm
Supplemental Aeration Technology:	Fine Bubble, Disks
MBR Blower Type:	Positive Displacement
Solids Management Data:	Belt Press
SCADA System:	Wonderware
Disinfection Method:	UV
# Process Stages:	3

MBR (Membrane Zone) Design

Filtration Mode:	Pumped
# of Reactors:	4
Submerged Membrane Unit (SMU):	RW400, KUBOTA®
# SMU:	16
Design Flux (MMF):	7.51 gfd
Minimum Temperature:	10°C
Peak Factor:	3.35
# of Maintenance Cleans:	4