

Project Profile...

**Montgomery County Sewer District - Fort Plain, NY
Aeration Upgrade**

Facility Contacts:

Superintendent: Edwin Pellegrini (518)993-4744
Engineer: McDonald Engineering, P.C. (518)382-1774
Installing Contractor: S. Miller General Contractors (518)661-5601

Project Summary:

The Montgomery County facility was equipped with mechanical aerators. Fine bubble ceramic disks were chosen for the upgraded aeration process. Factors leading to the decision for fine bubble aeration included power savings, simple installation, decreased maintenance, and increased treatment performance.

The in-place gas cleaning is designed to keep the aeration system operating at peak efficiency. Aeration system maintenance is minimized with the in-place gas cleaning system. In addition, the aeration basins may be cleaned without taking the system out of service.

Rising energy costs highlight the significance of controlling the plant operations budget – this project reduces the overall energy usage at the plant. The project was completed in just a few months from the time of award. Ed Pellegrini and his staff now have a low-maintenance, efficient, and reliable aeration system.

Basis of Design - Sanitaire Fine Bubble Ceramic Disk Aeration

- ↓# Design Average Daily Flow: 1.0 MGD
- ↓# Design Sustained Peak BOD: 2,240 pounds per day
- ↓# Activated sludge process in complete mix mode
- ↓# System sized for future flow and organic loading

- ↓# Two aeration basins total
- ↓# Each basin furnished with one grid of 9" diameter ceramic disks
- ↓# Total number of diffusers: 900
- ↓# In-place gas cleaning system with connections for portable cleaning equipment
- ↓# Pressure monitoring station for each aeration grid