

Project Profile...

Fonda-Fultonville WWTP, NY Aeration Upgrade

Facility Contacts:

Chief Operator: Charles Skinner (518)853-3469
Engineer: McDonald Engineering, P.C. (518)382-1774

Project Summary:

The Fonda-Fultonville 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. In northern New York, icing and splashing from mechanical aerators is also a design consideration.

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

Charles Skinner and Tim Healey now have a simple and highly efficient aeration system. The plant operations staff does not need to enter the tank to perform diffuser maintenance.

Basis of Design:

- ↓# Average Daily Flow: 0.7 MGD; Maximum Month Design Flow: 1.3 MGD
- ↓# Activated sludge process in complete mix or contact stabilization mode
- ↓# System sized for future flow and organic loading

Sanitaire Fine Bubble Ceramic Disk Aeration Equipment

- ↓# Four aeration basins total
- ↓# Each basin furnished with one grid of 9" diameter ceramic disks
- ↓# Total number of diffusers: 504
- ↓# In-place gas cleaning system with connections for portable cleaning equipment
- ↓# Pressure monitoring station for each aeration grid