Water Filter Prevents Clogged Sprinkler Heads

by Barry Cox, Superintendent, Atlantis C.C.

As with most golf courses, Atlantis Country Club in Tuckerton, N.J. was plagued with water quality problems. Providing irrigation water for the sprinkler system were two sources, a pond and a canal.

Model OR-04-PE filtering 350 gpm of canal water prior to distribution to sprinkler heads. A similar installation was made of an OR-08-PS filter for 1300 gpm of pond water.

The water from both sources was highly contaminated with suspended solids, including silt, sand, leaves, etc. Due to the lack of filtration, a large number of problems resulted from clogged heads. Not only did this result in increased maintenance requirements, it could result in inadequate irrigation as well.

The solution was to install two ORIVAL self cleaning water filters, one on each pumping station. The filters, one 8 inch, which filters 1300 gpm and one 4 inch, which filters 350 gpm, were both provided with the standard control system OR-E-1, which provides regulation of the filter rinse cycles.

The self cleaning filters employ a spot backwashing method to efficiently clean the stainless steel mesh fine screen. The fully automatic rinse cycle is line pressure powered, takes only seconds and does not interrupt system flow.

Both filters have worked better than originally anticipated. They have trapped a lot of debris that otherwise would have gone into the system. Samples of inlet, outlet and backwash water are shown in the accompanying photo. In particular notice the difference in concentration between the inlet and outlet water.

Prior to installation of the filters, there was a real problem with the sprinklers not going down when activated. Since the installation, this problem has been eliminated.

Individual filters are available in 2"–16" line size and can handle up to 5000 gpm. In addition, a line of manifolds is available to allow for greater efficiency when installing multiple units. For more information contact Orival, Inc.

Samples of inlet, outlet and backwash water. Notice the dramatic difference in concentration between the inlet and outlet samples.