

Wastewater Water Use at Hershey's Mill Golf Club

Hershey's Mill Golf Club
Jerred Golden, superintendent

West Chester, Pa.

The Problem

Conceived in the 1970s, Hershey's Mill is a golf course community with 2,000 homes surrounding a championship golf course. The developer realized there was one major hurdle; the township's water treatment facility was unable to handle the volume of treated wastewater generated by the increased amount of sewage from the new community.



Hershey's Mill Golf Club's reliance on effluent water ensures they have a dependable water source, even in times of drought.

The Solution

The concept of using spray irrigation – i.e., a method of disposing secondary treated municipal wastewater by applying it to a landscape – to water the golf course became a viable solution. However, there were many obstacles to overcome; notably the lack of permits and regulations for irrigating with treated wastewater because wastewater irrigation was not a common practice in Pennsylvania when Hershey's Mill was constructed.

Ultimately, soils had to be tested and classified, groundwater wells drilled, and aerosols collected and analyzed to establish testing protocols that were used to create baseline parameters for permitting the use of spray irrigation. After an arduous twelve months, a conditional permit was issued to Hershey's Mill that allowed the use of 49,500 gallons of treated wastewater per day for spray irrigation. Since the original permit was issued, modifications have increased the permissible volume of treated wastewater to 325,000 gallons per day.

The Results

The present day spray irrigation program has been an unqualified success for both the golf course and the community. The golf course has a dependable water source that never runs dry



This pond serves as the main holding and treatment pond for wastewater from the surrounding community. Once treated, the water is suitable and ready to use on the golf course as Golden feels necessary.

and the residents have an open, green space regardless of drought. One of the main objectives of spray irrigation is to safely recharge groundwater supplies and Golden, with 35 years of test results in hand, feels Hershey's Mill is achieving this objective.

The biggest challenge Golden faces is wet years. Although the golf course may not need additional water during years with ample rainfall, Golden still is responsible

for dispensing treated wastewater from the community. Therefore, 20 acres of permanent spray fields – i.e., areas of open

space that do not affect golf course playability or the community – were established so treated wastewater can be safely applied when the golf course does not need additional water.

Golden reports positive experiences using spray irrigation and feels any golf course that chooses to use treated wastewater as an alternative irrigation source will realize many benefits to the golf course, community and environment. However, Golden cautions those considering spray irrigation to do their homework and ask questions. If Golden were to suggest one thing, it would be to ensure there is plenty of available space of little importance to which treated wastewater can be applied to meet watering obligations without affecting golf course playability during years with ample rainfall.



Additional water storage ponds on Hershey's Mill Golf Club paid added benefits not originally conceived. Wildlife like ducks, fish and other aquatic animals flourish thanks to the enhanced ponds throughout the golf course.