

# Hydrotech Discfilter: Wastewater Reuse

## Filtration | Case Study

### *Utlely Creek Water Reclamation Facility*

#### The Client

Town of Holly Springs  
Chief Plant Operator: Terry Foster

Plant Capacity: 6 MGD (81,000 PE)



#### Kruger Discfilter Units

Contracted: November 2007  
Installed: January 2009 – June 2009  
Startup: August 2009

Design Engineer: Green Engineering  
Contractor: T. A. Loving Company

Kruger Contract: \$1.12MM  
Scope: (4) HSF2216-1F  
Discfilter Capacity:  
Average: 6.0 MGD (22,710 m<sup>3</sup>/d)  
Max: 15.0 MGD (56,780 m<sup>3</sup>/d)  
Effluent: TSS ≤ 5 mg/L

#### The Client's Needs

The Town of Holly Springs constructed a new wastewater facility due to the growing population in the area. The plant is anticipated to handle the needs of Holly Springs through 2030.

The Utlely Creek WRF plant is an activated sludge treatment process that also removes biological nutrients, including phosphorus and nitrogen, protecting downstream waterways. The downstream disinfection process is UV and the effluent discharges into Utlely Creek in the Cape Fear River Basin. The recycled wastewater is also used for irrigation to a golf course, a subdivision and the Holly Springs Business Park.

#### The Solution

Kruger supplied four (4) HSF2216-1F Hydrotech Discfilters (3 duty, 1 redundant). The Discfilter units are required to produce an effluent TSS of ≤ 5 mg/L based on the peak hourly flow with a peak influent TSS of 20 mg/l and an average TSS of 10 mg/L.

Kruger was selected based on a good working relationship with the design engineer, Green Engineering and the town, which allowed Kruger's Discfilter to be the basis of design.



