



## Rocky River Wastewater Treatment Plant Expansion to 9.5 MGD

- The Rocky River Wastewater Treatment Plant (RRWWTP) located southeast of the City of Anderson off of Kirkwood Drive is owned and operated by the City of Anderson, South Carolina.
- The RRWWTP treats municipal, domestic and pretreated industrial wastewater discharges from a portion of the City's wastewater collection system, Anderson County and Homeland Park Water and Sewer District.
- The Rocky River Sewer Service Area includes the Broadway, Upper Rocky River, Beaverdam Creek, Little Beaverdam Creek, and the Town Creek drainage basins, as well as drainage basins located in Starr and Iva. By year 2030, the estimated area served by the RRWWTP will encompass 132 square miles.
- The expansion of the RRWWTP for the City of Anderson was designed to expand the rated capacity from 6.1 million gallons per day (MGD) to 9.5 MGD.
- Key elements of the expansion were:
  - Replacement of the existing influent bar screens and grit removal system
  - The addition of a third 3.4 MGD treatment train including primary clarifier, trickling filter, and RBCs (Rotating Biological Contactors)
  - The addition of a 9.5 MGD tertiary filtration system
  - Replacement of existing chlorination and sulfur dioxide disinfection equipment with 21 MGD ultraviolet light (UV) disinfection system
  - Computer based plant control system
  - Increased digester capacity
  - Associated site work, plant piping, and electrical additions including standby generators
  - Upgrades or replacement of existing process equipment and plant piping
- The contract amount for the project was \$26,577,000.00.
- The construction of the project began in October of 2008 and was substantially complete in February of 2011 (27 months).
- The total change orders for the project were less than 0.30% of the total contract amount.
- The overall performance of the plant has significantly exceeded the limits of the NPDES Surface Water Discharge Permit as established by the Department of Health and Environmental Control.
  - Total Phosphorus Limit: 41.2 lbs/day.
    - Past three month average: 15 lbs/day
  - Total Suspended Solids (TSS) Removal Limit: 85%.
    - Past three month average: 98.3%
  - Biological Oxygen Demand (BOD) Removal Limit: 85%.
    - Past three month average: 95.7%

Design Engineer: Design South Professionals, Inc., Anderson, South Carolina

General Contractor: Wharton-Smith, Inc., Sanford, Florida



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