



# JEFFERSON COUNTY ENVIRONMENTAL SERVICES TURKEY CREEK WATER RECLAMATION FACILITY

CONSTRUCTED: 2004 | PERMITTED AVERAGE CAPACITY: 5.0 MGD  
PEAK FLOW CAPACITY: 20 MGD | GRADE IV FACILITY



7137 Disposal Plant Road  
Pinson, Alabama 35126

The Water Reclamation Facility (WRF) is a 5.0 MGD plant located near the town of Pinson. The facility receives flow from Pinson, Clay and Chalkville, Alabama and serves approximately **1,000 residents**. The original plant was newly reconstructed in 2004.

- Discharges to Turkey Creek and is in Black Warrior River Basin
- Treats up to 20 MGD during wet weather events
- Personnel: consisting of
  - 5 Grade IV
  - Trainees
- Plant is staffed 10 hours per day, 5 days per week and weekends for 8 hours per day
- Growing season regulatory compliance phosphorus limit from April-October is 32.4 lbs. per day
- 2 years with 100% NPDES Permit compliance receiving numerous industry awards for excellence

## History

- The reconstruction of the facility in 2004 resulting in an activated sludge utilizing oxidation ditches process with mechanical aeration along with final clarification. The plant also employs UV disinfection.
- Biosolids are aerobically digested and applied to drying beds to dry before being land applied
- The plant is utilizing polyaluminum chloride for phosphorus removal to assess treatment alternatives should future phosphorus reduction is needed
- Permit limits are: dissolved oxygen minimum 6.0 ppm, ph minimum 6.0 and maximum 8.5 ppm, total suspended solids 30 ppm monthly, ammonia 2.5-5.0 ppm, e-coli 126-548 col/100ml monthly, CBOD 20 ppm monthly.

## Future Upgrades:

- A new chemical feed tank is going to be constructed along with new pumps to help meet the new phosphorus permit limit of .25 ppm.

**Director: David Denard | Deputy Director: Margaret Tanner | Plant Superintendent: Chad Quick**