

CASE STUDY

ECOPOD Solves Treatment Challenges for Rural Town

Section, AL

SYSTEM SPECIFICATIONS

30,000 GPD Wastewater Treatment System

INSTALLATION DATE

2018

PRODUCTS

ECOPOD® Advanced Wastewater Treatment System
Drip Disposal System

OWNER

Town of Section, Section, AL

ENGINEER

Ladd Environmental Consultants, Fort Payne, AL

INSTALLER

Dale's Backhoe, Eclectic, AL

DESCRIPTION

The town of Section is in the northeast corner of Alabama and has a population of 770. Local septic systems did not meet current requirements and the town needed a 30,000 gallon per day wastewater treatment system to process the domestic waste produced by both residential and commercial entities.

System designers recommended an ECOPOD Advanced Wastewater Treatment System for the two-phase project. The ECOPOD disposes of wastewater quietly, efficiently and with no odor and has no inner tank filters, screens, or diffusers to service. Its total nitrogen removal capabilities and simple operation make it ideal for rural communities.

The 30,000 GPD system treats domestic waste at a strength of 300 mg/L for both BOD and TSS and was designed to handle an average daily flow fluctuation of 50 to 100 percent. The ECOPOD units were installed in poured-in-place concrete tanks equipped with aluminum hatches. A 14,200-gallon flow equalization tank was installed prior to the ECOPOD treatment reactor tanks to store the wastewater and evenly dose it to the ECOPOD treatment system throughout a 24-hour period. The flow equalization tank includes duplex pumps to ensure flow surges don't reduce the efficiency of the treatment system. A 19,190-gallon primary tank precedes the flow equalization tank. The effluent also passes through a UV system for disinfection of fecal coliform to concentrations below permit levels. A drip disposal system includes an effluent pump chamber, headworks, tubing, controls, and all necessary valves and fittings. A concrete building was constructed on-site by the project contractor to house electrical controls and equipment.

The ECOPOD system requires minimal operation and maintenance once installed. Weekly checks involve a visual inspection of operating equipment such as blowers and pumps to ensure they are working correctly. Monthly visits involve more hands-on maintenance, such as cleaning filters and refilling chlorine tablets (if needed). Semi-annual

maintenance would be based on manufacturers recommendations for equipment, such as belt tightening, UV bulb checks/ replacements or mechanical equipment lubrication.



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