

CASE STUDY

An Affordable Wastewater Treatment Solution for Institutions and Small Municipalities

Glenford, Ohio

Problem

The village is an unsewered community with failing septic systems.

Solution

EarthTek was selected to provide a 36,000 gpd SABRE sequencing batch reactor (SBR) treatment plant.

Glenford, a small village community with 69 households, had failing on-lot septic systems. In April 2014, Ohio Public Works Commission awarded the village funding to transition from their on-lot septic tanks to a centralized system.

The village hired the consulting firm ADR and Associates to develop a plan for a new plant. The firm's project engineer, Jeff Carr, P.E. evaluated several options, eventually settling on a STEP collection system with a recirculating media filter (RMF) treatment process.

EarthTek of Batesville, Indiana became involved late in the project, and offered the SABRE SBR as an alternate option to the RMF. The engineer included the SABRE SBR as a required bid alternate with the RMF when the project was advertised. After the bids were received, the village selected the SABRE SBR.

Testimonial

"I love the plant! It is easy to operate once you have been properly trained, which they come to your plant to do. Plus, Kevin and his staff are always readily available to ask any questions. Being able to operate the plant from your home or anywhere, for that matter, is a plus too."

-Tom Coleman, Licensed Plant Operator

Institutional Market

Project Overview

Glenford, Ohio



Design Parameters

- 69 households

Annual OM&R

- \$8,568

Primary Treatment

- 20,000-gallon primary FRP tank

Secondary Treatment

- 35,000-gallon EarthTek SABRE SBR

Tertiary Treatment

- Tertiary Filter
- UV Disinfection
- Post Aeration

Dispersal

- Surface water discharge with NPDES permit

Operation

- Part-time operator

Influent Quality

- < 250 mg/l BOD5
- < 200 mg/l TSS
- < 60 mg/l NH3-N

EarthTek SABRE Effluent Quality

- < 10 mg/l BOD5
- < 12 mg/l TSS
- < 1 mg/l NH3-N

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Glenford, Ohio

Institutional
Market

EarthTek's SABRE SBR system was selected due to:

- Requires much less space than the RMF
- Utilizes buried fiberglass tanks to be aesthetic, and minimizes odors due to the plant being located adjacent to several homes
- Simpler to operate and maintain with lower operating costs
- Less costly than the RMF system

The package wastewater treatment system included a 20,000-gallon, 10' diameter, single-compartment buried fiberglass (FRP) treatment tank, one 35,000-gallon, 10' diameter, single-compartment buried FRP SBR tank for secondary treatment, followed by mechanical filtration, ultraviolet disinfection, effluent flow monitoring, post aeration, and composite sampling.

The treated effluent has met the regulatory discharge permit limits of 10 mg/l BOD5, 12 mg/l TSS, 1 mg/l Ammonia as Nitrogen, and 125 count/100 ml E Coli since it was put into operation in the fall of 2015.



For more information about EarthTek SBR systems, contact EarthTek, at 800-972-9940.



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