

The dwelling will be connected to the existing septic tank serving the applicant's home, Eastwick Manor.

The dwelling will be occupied by people who would otherwise live in Eastwick Manor and there will be no increase in the quantity or nature of waste produced.

The septic tank is working properly but to provide some reassurance and for the project to provide environmental benefits the applicant has offered to replace the septic tank with a treatment plant which produces effluent known to be significantly cleaner

How Does a Sewage Treatment Plant Work for a Home?

A domestic sewage treatment plant works to produce the cleanest possible effluent wastewater as a result of its treatment process. This is achieved through the circulation of air which encourages the growth of good bacteria to help break down sewage. But how does a sewage treatment plant operate, exactly?

Below, we've set out the stages of treatment achieved in a sewage treatment plant so you know what process is happening and where. Plus, learn more about the similarities and differences between UK domestic treatment plants and septic tanks – so you can find the best system for your property.

The Stages of Sewage Treatment

The process for sewage treatment in a sewage treatment system isn't too different from that of septic tanks. However, mechanical components provide additional steps and activities that break down solid masses further, resulting in a cleaner, more environmentally friendly effluent.

The stages for the treatment process are as follows:

Waste Water Enters the System

Sewage, comprised of wastewater and solid matter, leaves the residential property and is fed into the first chamber of the sewage treatment plant. This is called the "primary settlement tank", and it's here that the solid matter is separated from the liquid waste.

Solid organic matter will sink and settle at the bottom of the tank, while grease, oil, fats, and other scum will float to the surface. The liquid will pass through the system.

Liquid Waste Enters the Second Chamber

The second chamber, also called the biozone chamber, is where the process differs from septic tanks. The biozone chamber is fitted with an air pump which circulates air around the chamber to encourage the growth of bacteria. This good bacteria breaks down contaminants in the liquid that flows through, purifying it and creating a better effluent quality.

The Final Settlement Chamber

In the final treatment stage, the liquid waste will pass through the last of the settlement tanks. This is also known as the humus chamber. Here, any remaining solid matter will sink to the bottom of the tank before the effluent passes through.

Discharge

By the time the wastewater is discharged from the humus chamber, it will typically be around 95% clean. At this stage, it is ready for discharging into the ground (a drainage field) or to surface water (such as a lake or stream).

It should be noted that where the wastewater can be discharged is subject to consent from the Environment Agency.

Sewage Treatment Plants vs. Septic Tanks

Many people believe that septic tanks and sewage treatment plants are the same. This isn't the case; while the treatment process the two systems use is similar, the result is not the same. Because of this, the places where each system can be installed and the regulations around their use are not the same, either.

A septic tank will produce much more polluting wastewater as a result of its use than a sewage treatment system will. This means, by law, that they are not allowed to discharge to watercourses in most cases. Pollutants from septic tank systems are made cleaner by bacteria in naturally aerobic soil. The system itself also doesn't need an electrical supply, and should only need emptying once or twice a year at most.

A sewage treatment plant, on the other hand, produces mostly clean wastewater as a result of its processes and can be discharged to surface water. They also require an electrical supply to operate, as well as regular servicing.

Will a Sewage Treatment Plant Still Need Emptying?

Yes. Even though a treatment plant is designed to clean wastewater as efficiently and effectively as possible, and can often handle more waste than septic tanks, they will still require emptying. Solid waste matter from the settlement tanks will need to be removed from the system to keep it working properly. Clogs and blockages may form otherwise, stopping the system up and potentially damaging the system itself – and causing issues for your property.

How often a system should be inspected, cleaned out, and maintained will usually depend on the model and the instructions provided by the manufacturer and the installer. In most cases, systems will need to be emptied at least once a year.

Our Sewage Treatment Plant Services

If you're looking to install or maintain a domestic sewage treatment system, look no further than BlockBusters. Our experienced installation team ensures a seamless and tailored installation process for your property. Additionally, our reliable professionals provide top-notch maintenance and emptying services for existing systems.

If you're considering replacing your worn-out septic tank, we've got you covered. In these cases, the costs are typically covered by your insurers, granting you a brand-new, highly efficient system at no additional expense. This can save you thousands in replacement costs. Contact us today (<https://www.blockbusters.co.uk/contact-us/>) and experience the benefits of working with BlockBusters.

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