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MAINTENANCE OF THE VARIOUS SYSTEM O)) SOLUTIONS

The required maintenance of a wastewater treatment system is an important element to consider when choosing between different technologies. Whether it's about the time required to do the maintenance, the number of times it should be done annually or how many components require replacing or fixing, you should know the obligations you'll face once you install a septic system, to avoid unpleasant surprises.

There are many different kinds of System O)) solutions, according to site conditions, daily flow and required treatment. Although the Advanced Enviro)) Septic technology is at the core of a System O)) solution, each of these different solutions have varying maintenance needs.

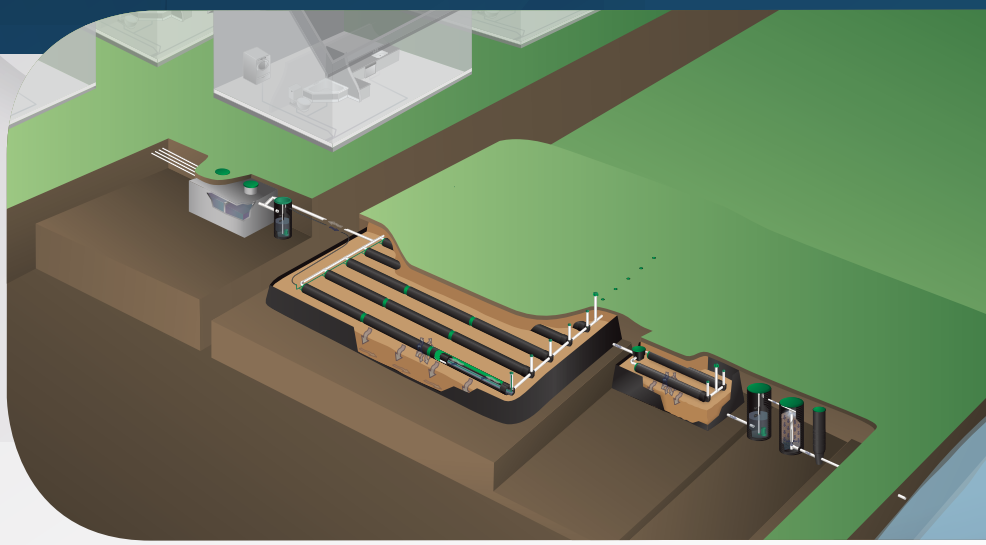
Our goal here is not to be specific, but to provide an overview of the maintenance recommendations for each System O)) solution. You will then know what actions are required for each model, and be in a position to better inform your clients. Local regulations take precedence and must be complied with above all else.

SECONDARY TREATMENT WITH INFILTRATION

As this is a completely passive treatment system, without requiring any media change or moving parts, the maintenance of secondary treatment System O)) solutions with infiltration is minimal. For these reasons, we prefer to use terms like “monitoring” or “inspection”. This doesn’t cancel the need for regular monitoring to detect possible anomalies and ensure the system continues to function normally and protect the environment. Here are some recommendations regarding the annual monitoring of this System O)).

At least once a year, each visible element should be inspected to detect any trace of breaks or abnormal water accumulation. This includes the piezometers, sampling device, vents and the distribution box or low-pressure injectors. Moreover, any sign of water accumulation on the surface of or around the system should be reported for a more in-depth inspection. For any questions or for our dedicated help with the inspection of your System O)), please contact Customer Service.

The inspection of these elements should be included in the monitoring required by local regulations.



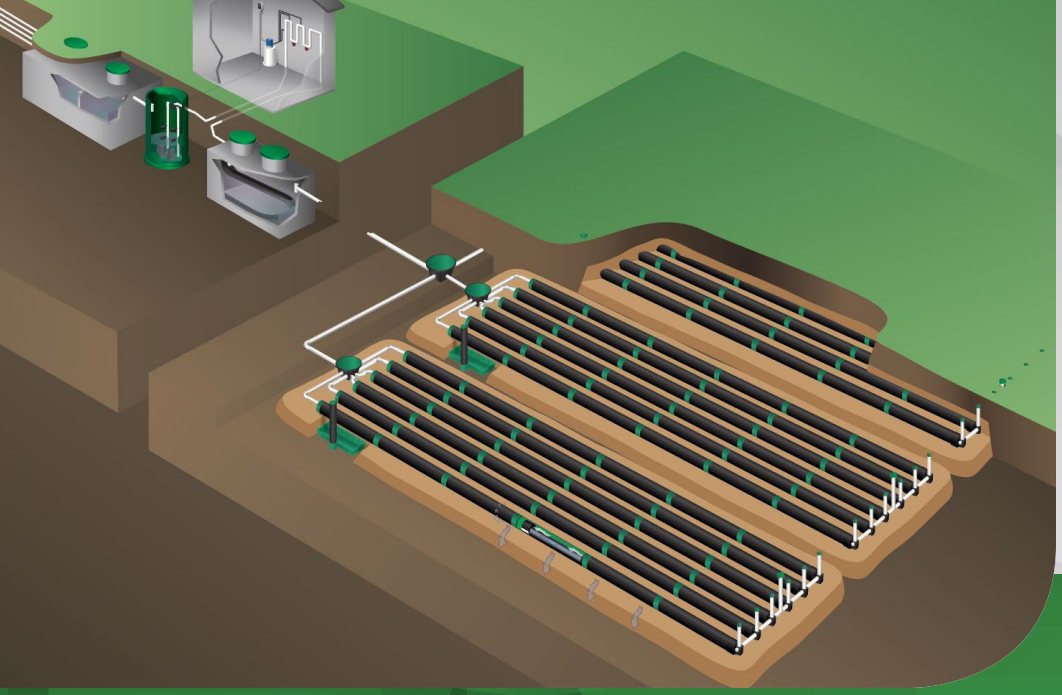
DEPHOS O))

The phosphate removal and passive disinfection System O)) solution is composed of a first treatment system, then a reduced polishing field and followed by the Dephos O)) unit.

Although the treatment of the organic load, fecal coliforms and phosphate is passive, particular attention must be given to the system’s various elements. The water level in the piezometers, as much for the first treatment system as for the reduced polishing field, ensures the proper functioning of the Advanced Enviro))Septic technology.

Regarding the Dephos O)) unit, two elements should be checked occasionally to ensure the system functions well: the sprinklers and the substrate. Simple visual inspections can ensure the sprinklers are aligned and distribute water evenly, and that the substrate shows no signs of accumulation of or abnormal microbial growth. If you have any doubts, don’t hesitate to send a picture to your local representative.

As this is a passive tertiary treatment system with disinfection and phosphorus removal, sampling campaigns to check for the presence of fecal coliforms and total phosphorus are recommended if they are not already required by local regulations. When these analyses reveal a loss of efficacy in terms of phosphorus removal or disinfection, the substrate should be changed. As a guideline, it should not need to be changed prior to a minimum of 5 years, when usage complies with the recommendations of the System O)) User Guide.



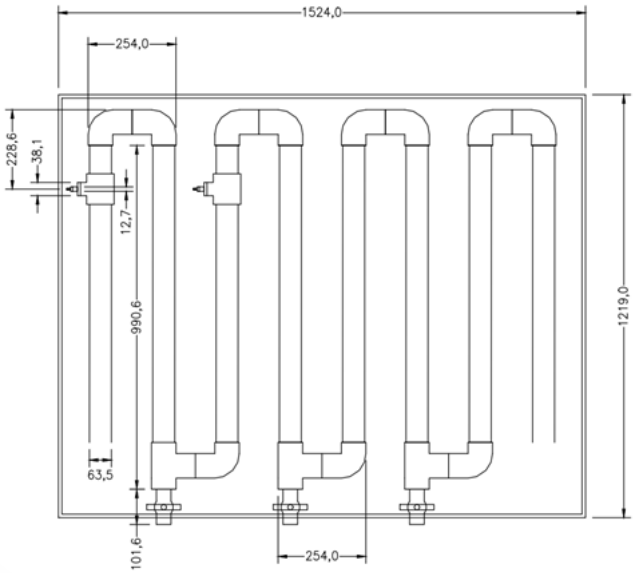
CHEMICAL PHOSPHORUS REMOVAL

This solution includes a chemical phosphorus removal unit that can be placed before or after the treatment system with Advanced Enviro))Septic technology. Equipped with a static mixer, a diaphragm dosing pump, a reservoir for the coagulant as well as a decanter, some steps are required to maintain this system.

First, to prevent build-up on the static mixer, it should be purged from time to time. Valves before each section of the mixer allow for this. Also, the dosing pump should be rinsed with clean water to clear any accumulation or crystallization of the coagulant. These steps should be taken once per year. For systems in operation seasonally, these are the only steps required when the system is shut-down.

Regarding the coagulant reservoir, if it doesn't have a low-level alarm, it should be checked regularly to make sure it doesn't run out of coagulant. Finally, the level of sludge in the decanter should be monitored and emptied when it reaches 55% of the effective capacity of the reservoir.

Finally, sampling should be done from time to time to ensure the treatment levels meet the standard and that a coagulant dose adjustment can be done if the phosphorus removal is insufficient.



DISINFECTION BY ULTRAVIOLET RADIATION

Ultraviolet (UV) radiation lamps should be maintained occasionally to ensure the effluent is adequately disinfected. It is important to respect the maintenance frequency described in the manufacturer's user guide and by local regulations, if applicable. Moreover, the power to the UV lamp should be shut off when the system is shut-down for an extended period, to make sure the lamp does not light when there is no water.

As for any other tertiary treatment, sampling should be done occasionally to ensure the treatment unit functions as it should. An unsatisfactory sampling result should immediately lead to the maintenance of the UV lamp.

CONCLUSION

We've provided an overview of the important maintenance aspects of the different System O)) solutions to adequately inform designers or future owners so that they can choose a technology with their eyes wide open.

For any other questions related to the maintenance of System O)) solutions, don't hesitate to reach out to your representative or the technical team at DBO Expert, whose contact information can be found on our website at dboexpert.com.