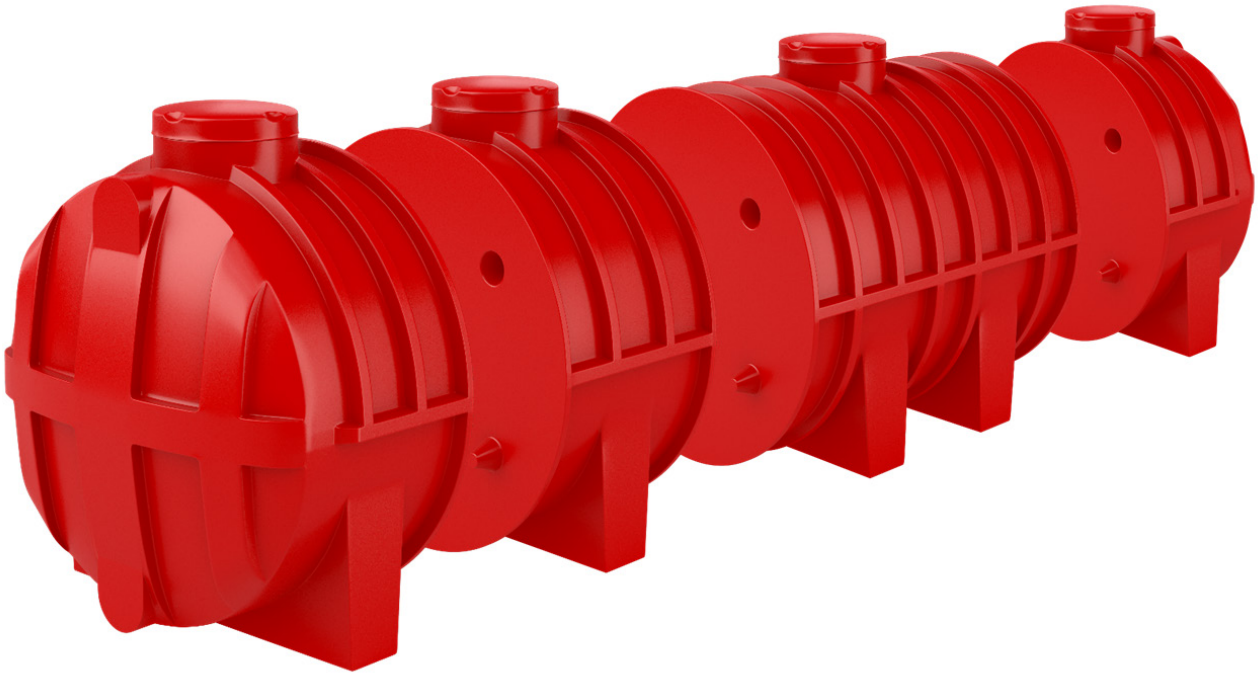
BIG RED Operational Brief

It's important for everyone using an Eco Tanks BIG RED® WWTP to have a basic understanding of the workings of the Plant.



- The BIG RED® is a package "Biological Waste Water Treatment Plant".
- The plant is designed for "domestic and/or industrial waste water".
- Influent is gravity fed from the house into the WWTP.
- This influent enters the primary tanks. These tanks act as "septic tanks" also known as the anaerobic or anoxic zone tanks. Here bacteria are at work breaking down the waste stream (organic matter) into a simpler state.
- As the new influent enters the plant, the stream is automatically (gravity fed / free flow) moved along into the next tank. This is the aerobic bio-reactor. Here air (oxygen) is introduced into the stream where particular bacteria continue the degradation of the waste stream.
- In this "zone", these specialized bacteria require mainly 3 things – food, housing and oxygen. The stream containing organic matter is the "food", the bio media is the "house" and the aerators/diffusers supply the "oxygen". If those elements are all in equilibrium and sufficient, the performance of the system and the resultant quality of the treated effluent will be greatly improved.
- From here, the influent moves into the penultimate tank where any "uneaten matter or missed matter" is re-directed by internal pumps and pipes back to the anoxic zone so the process can start all over again, kind of a back-up plan.
- Finally, the treated stream enters the last tank known as the Pump/Disinfection Chamber. This chamber is fitted with a submersible discharge pump connected to a float switch. As the stream reaches a certain volume in the tank, the pump activates and discharges through the in-line chlorinators and out via the sprinklers.

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