



SOLUTIONS

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- Cigar® - Biogas Reactors
- Anaerobic Digestion
- **Aerobic Treatment**
- Odour Control
- Waste Products
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Aeration is a common treatment process for both domestic and industrial wastewaters.

In regard to aeration, there are many different process configurations depending on the specific application. Waste Solutions has experience with suspended growth, biological nitrogen and phosphorous systems, fixed film systems and also with modelling facilities such as G8S-X to test and refine treatment plant design performance.



Traditionally, rule of thumb methods have been used for the sizing of aeration requirements and hence aeration equipment.

Waste Solutions uses a more fundamental approach based on a thorough understanding of microbial and physical processes to design aerobic treatment systems.

Variability in the aeration characteristics of wastewaters from plant to plant are often not accounted for using traditional rule of thumb methods for sizing aeration equipment. This often results in a large safety factor which is expensive. Optimisation of aeration efficiency can be achieved by evaluating aeration characteristics of a wastewater and the efficiency of aeration equipment in a particular wastewater.

Waste Solutions has developed procedures for testing both the aeration characteristics of a wastewater and the aeration efficiency of aeration equipment in a particular wastewater. This results in aeration equipment with least life cycle cost.

Waste Solutions' knowledge of the fundamental processes involved in the treatment of municipal and industrial wastes means the company is able to deliver optimum and cost effective solutions to customers.

Where it is necessary, on-site pilot trials or pilot plants are used to develop effective solutions with lower life-cycle costs.