

MBBR System for lagoon treatment

Municipal wastewater treatment authorities are continuously faced with new challenges to meet ever stricter permits. Our nation's lagoon plants are not immune to this. Designed and built in a day when BOD reduction was good enough, lagoons are now faced with the fact that they must reduce ammonia nitrogen as well and to very low concentrations. Short of starting from scratch with a new process, cost effective alternatives are scarce.

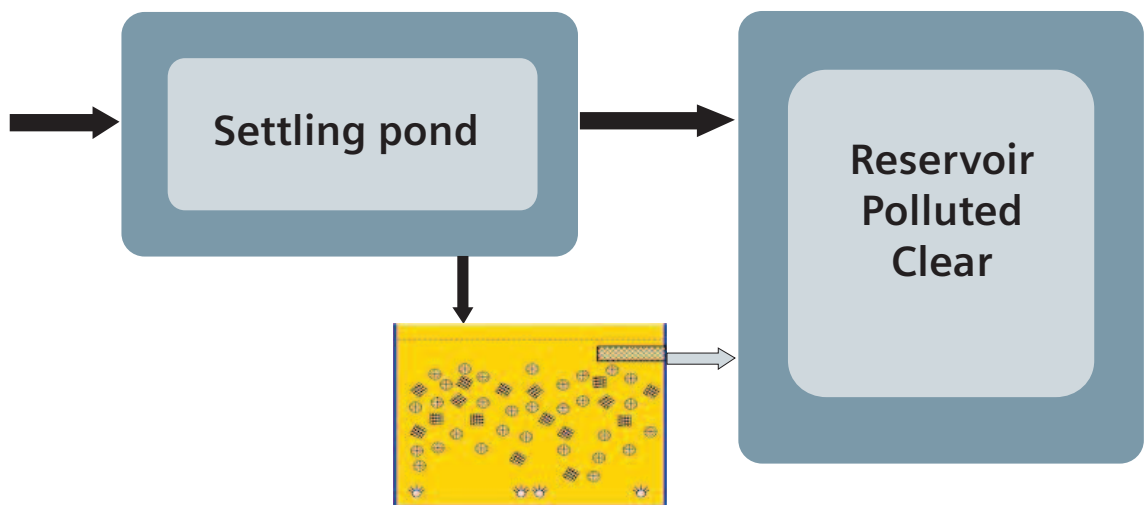
The Siemens MBBR system can be installed following a lagoon for nitrification and BOD polishing instead of starting from scratch with a new process. The MBBR follows the same operational simplicity as the lagoon with no activated sludge to recycle, no SRT or F:M ratios to manage and has a small enough footprint for plants that are already short on land. Just a once through system that effectively nitrifies and polishes lagoon effluent.

The Siemens MBBR system uses carriers designed to create a large surface area for biofilm growth to do the work.

Siemens MBBR System Benefits

- Compact footprint
- Expandable
- Durable non-clogging media
- Stable process
- Ease of operation

Fully open – fully protected biomass carrier specially designed to protect biofilm against abrasion and shear without compromising mass transfer efficiency. Typical plant layout.





Lagoon MBBR in Georgia



Example requirements for lagoon MBBR

Parameter	Influent	Effluent
BOD	28	< 20
TSS	52	< 20
NH3-N	14	< 5

Siemens
 Water Technologies
 1901 S. Prairie Avenue
 Waukesha, WI 53189
 262.547.0141 phone
 262.547.4120 fax

© 2010 Siemens Water Technologies Corp.
 BC-LAGOONdr-CS-0810
 Subject to change without prior notice.

The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.