

Phosphate removal

With a chemistry similar to the antacids used in our human digestive systems, Calix can safely and cost-effectively remove phosphate from municipal and industrial wastewater.

Trouble achieving your phosphate licence/limits?

Nuisance struvite deposits causing pipe blockages and maintenance costs?

Excess usage of chemical elements like lime and alum leading to higher operations cost?



ACTI-Mag, a very high surface area magnesium hydroxide liquid, targets phosphate while improving pH and organics removal within the wastewater treatment plant.



Significant reduction in phosphate levels at discharge.



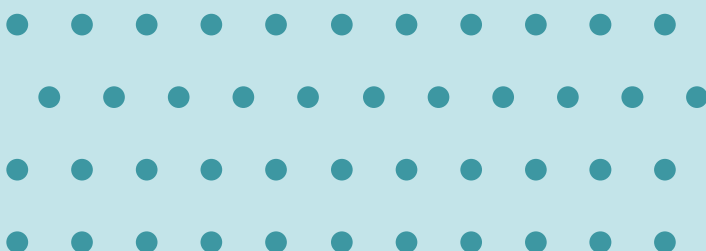
Improvement in effluent Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD)



Stabilised pH throughout the waste water treatment system.



Elimination of fats, oils and greases (FOGs) build up in the anaerobic ponds.

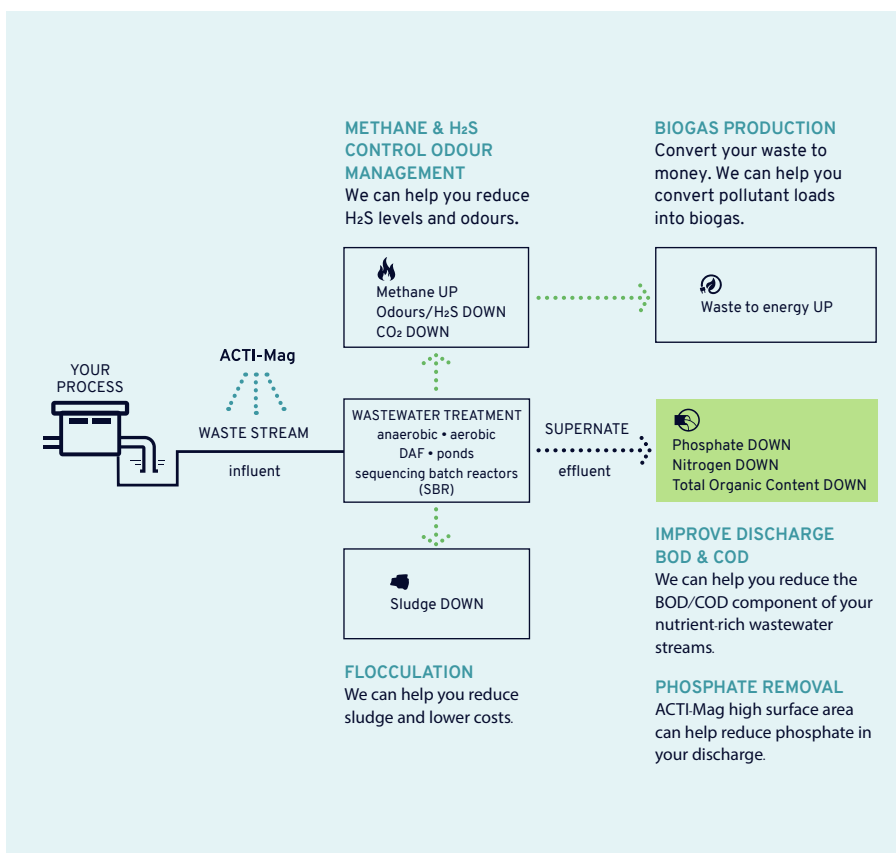


WHY IS PHOSPHATE AN ISSUE?

Phosphorus - usually in the form of phosphates - comes from sources such as human and animal waste, detergents and food residues and has to be treated and reduced from the wastewater in order to meet environmental standards before it is discharged into a local water body, or land irrigation..

There are two methods of removing phosphorus from wastewater: biological removal and chemical removal. Establishing and maintaining biological conditions for effective and continuous biological phosphorus removal can be quite challenging.

ACTI-Mag boosts this biological phosphate removal while at the same time capturing the excess phosphate within the sludge, which is beneficial for composting of solid waste.



HOW DOES ACTI-Mag WORK

ACTI-Mag has demonstrated rapid capture of most phosphate as a solid within the sludge, reducing effluent nutrients with potential to form phosphate-based struvite scale.

The highly porous ACTI-Mag particle structure causes phosphate and ammonia to crystallise within the particle. The high pH inter-particle boundary layer is used to rapidly capture these nutrients in the sludge, which when used as compost or fertiliser improves root growth and bloom of flowering or fruiting plants.

WHY CHOOSE CALIX

FASTER REACTIVITY = COST SAVINGS

New materials produced by Calix's technology are proving to have similar properties to highly active nano-materials, without the safety concerns and high cost, but with all the benefits. This means it has the high reactivity of nano-material, without the potential health and handling issues. To learn more about Calix's technology, visit our website.

FROM MINE TO CUSTOMER

Calix is able to offer better service, reliability and performance to its customers because it controls the entire production process from mining of raw materials, processing and production.

ACTI-Mag lowers chemical consumption and ensures easier use, handling and storage, thus considerably reducing costs.

ACTI-Mag also offers the following benefits:

- Fats, oils and greases control
- Biogas management
- Odour control cleansing the sewer
- Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) reduction

Read our other solution spec sheets or call us today to discuss the benefits of a whole-of-catchment approach.

Distribution partners

Calix has established a network of local distributors and partners who can deliver our solutions across the globe, to ensure you receive excellent customer service and support, wherever you are located.

To find a Calix office or partner near you, visit:

WWW.CALIX.GLOBAL

