

Water & Waste Management

BioSpikes® 5000

General Industry

Recover capacity with a biological alternative to dredging lagoons

Reduce dredging costs and improve system efficiency in wastewater lagoons.

High sludge levels are source of concern for many municipal and industrial wastewater lagoon operations. The high sludge levels affect the treatment capacity and dredging is a costly operation.

BioSpikes® 5000 offer a new way to minimize settled sludge volume and reduce solids handling costs in wastewater lagoons. BioSpikes® 5000 are formed as dense spikes that rapidly sink to the bottom of a lagoon, even when applied at the water's surface. This makes dosing easy and ensures contact between the microorganisms and the sludge. It is also easily applied to problem build-up areas to eliminate short-circuiting.

When the BioSpikes® 5000 sink to the bottom of the lagoon they release billions of microorganisms, powerful enzymes, and essential micronutrients directly into the sludge layer. This combination ensures rapid stimulation of biological activity and reduction of the sludge layer. This reduces the dredging frequency, increases hydraulic retention time, and improves overall lagoon performance.

The benefits of using BioSpikes® 5000

Lower operating costs

- Reduces dredging frequency
- Reduces volume of sludge to be dredged

Improved plant efficiency

- Improves hydraulic retention time
- Increases operating lagoon time
- Minimizes short-circuiting

Simplified operations

- Can be applied directly to hot spots
- Reduces sludge without interrupting treatment

Start of treatment

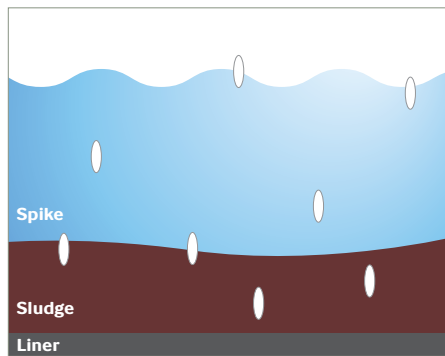


Fig 1. BioSpikes® 5000 are dropped at the water's surface and sink directly into the sludge layer.

During treatment

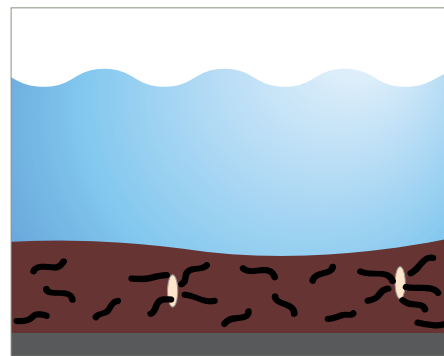


Fig 2. Microorganisms, nutrients, and enzymes permeate throughout the sludge layer.

After treatment

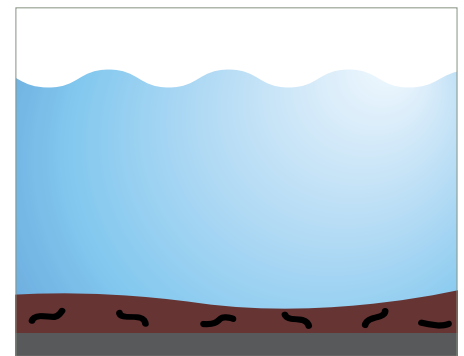


Fig 3. Microorganisms, enzymes, and nutrients stimulate biological activity and reduce the sludge layer.



Enhancing your business is our business

Team up with Novozymes for innovative biosolutions to reduce costs, improve water quality, and capitalize on renewable energy opportunities. Unique products, experience with beneficial microorganisms and enzymes, and our commitment to improve our business are just three reasons to choose Novozymes as your bioinnovation partner.

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For more information please visit www.novozymes.com

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Novozymes A/S

Krogshøjvej 36
DK – 2880 Bagsvaerd
Denmark
Tel. +45 4446 0000

<http://biosolutions.novozymes.com/industry/wastewater>