ALGAE CONTROL AUSTRALIA + AMACRON GOLF & TURF
Quality mower parts and Greenkeeper requirements

FOR GOLF COURSE SUPERINTENDENTS

PBE

Prebiotic Bacteria Enhancer

For golf course water management



What is PBE?

A block-based approach to supporting beneficial bacteria.

The name explains the idea.

PBE stands for **Prebiotic Bacteria Enhancer**. A prebiotic is material intended to support bacteria; it is not the live bacteria itself.

Bacteria does the work.

Bacteria growing on PBE obtain nutrients from the block and their surroundings. They produce enzymes to help break down available food.



ACTUAL PRODUCT

01

Prebiotic

Material intended to support bacteria.

02

Bacteria

Living organisms that can grow and reproduce.

03

Enzymes

Proteins that speed up specific breakdown reactions.

Contact us to determine the right solution.

We work with you to identify the problem and select the right blocks and accompanying treatment for your course.

Start with your course's priorities.

Agree on the problem to solve, then measure the response.



Aquatic plant growth.

Algae and water appearance

Photograph visible growth and the water surface from repeatable positions, including known algae and weed species. Set a clear starting point so you can compare changes over time.



Organic sediment detail.

Sludge and organic build-up

Organic sludge can hold nutrients that support unwanted growth, making it a key target in dam management. PBE supports bacteria that help break down this material.



Irrigation filter and debris.

Irrigation-related maintenance

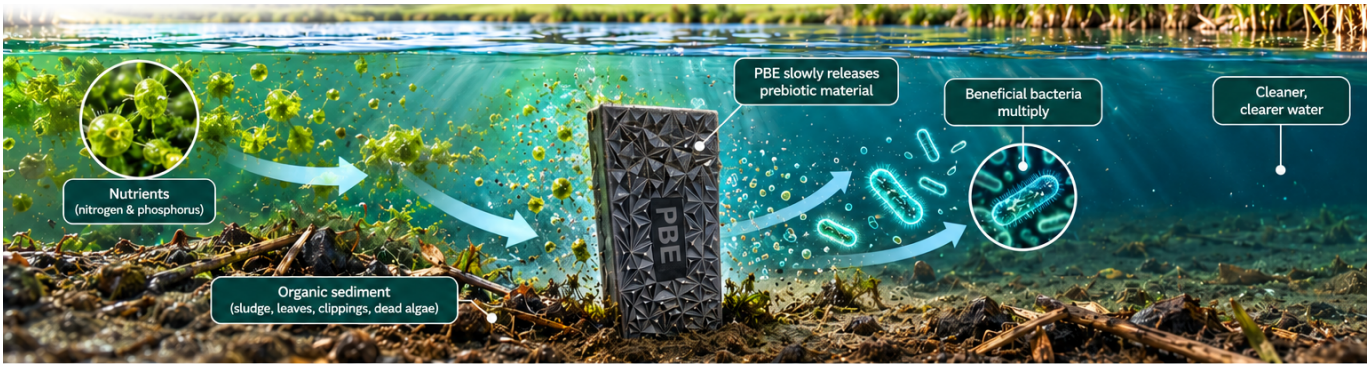
The aim is to reduce organic build-up that can block solenoid valves, sprinkler heads, filters and pump intakes, helping reduce the risk of related damage. Keep an eye on these areas to monitor improvement.

Show the change over time.

Use photographs from the same positions to show visible changes over time, alongside water observations and maintenance notes.

How it works

A five-step process that supports the beneficial bacteria already living in your water and sediment.



Concept only; not a real installation.

1



Place the block

Position the selected PBE block at designated locations in the water body according to a course-specific treatment plan.

2



Support beneficial bacteria

The block slowly releases prebiotic material, making beneficial bacteria **proliferate 800% more than without the PBE.**

3



Address nutrient pressure

Bacterial activity helps use nitrogen and phosphorus that otherwise support algae growth, and helps unlock nutrients not yet available for biological use.

4



Break down organic sludge

Beneficial bacteria process leaves, clippings and dead algae on the dam floor, helping to reduce organic sludge over time.

5



Monitor the balance

Track algae, water clarity and odour. One treatment may not be enough; review every **5–6 months** to decide whether repeat treatment is needed.

Working with nature

Support natural biological balance, rather than relying on algaecides or herbicides.

The PBE range

Let us match the application to the job.

Water & Benthic Block

1 kg and 3.5 kg

Floating Block

1 kg and 3.5 kg

30/30 Weed Block

1 kg and 3.5 kg



Product reference · not shown to scale.

The right solution for your course.

We work with you to match the block and placement to the problem.

A plan for your water body.

Discuss the problem. Agree on a plan. Keep a record of the response.

1 Discuss your site

Share a map, water use, existing treatments and the problems you want to address.

2 Agree on a plan

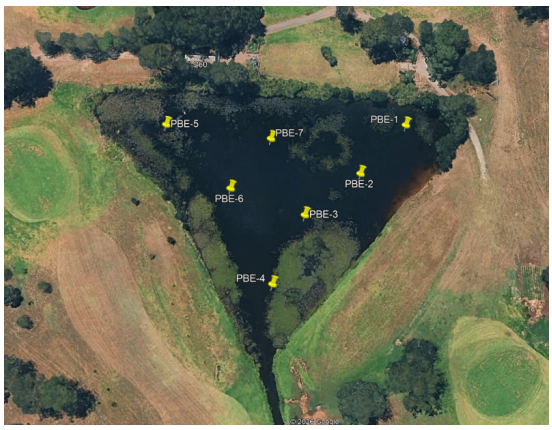
Algae Control Australia prepares a numbered block layout for the water body.

3 Place the blocks

Algae Control Australia will provide installation and placement details for the selected blocks.

4 Monitor the response

Take photographs from the same positions and monitor changes. Review every 5–6 months to assess whether repeat treatment is needed.



EXAMPLE PLACEMENT PLAN

Your plan will show the block positions for your water body.

Let’s assess your course’s water.

Josh Shedden | Amacron Golf & Turf / Algae Control Australia

0447 233 143 · josh.shedden@amacrongolf.com.au

WANT THE DETAIL? CONTINUE TO PAGES 7–8.

Science and results.

The biological process and selected dam observations.

How bacteria and enzymes work together

Bacteria are living organisms that take up nutrients and produce enzymes—proteins that speed up particular reactions. These enzymes help break down organic material. Bacteria growing on PBE obtain nutrients from the block and their surroundings; different bacteria and enzymes work on different materials.

Recorded changes at selected sampling points

Gap Dam and Jacko's Dam · 23 November 2022 – 29 January 2023

Measurement	Sampling point	Recorded decrease
Nitrate (as nitrogen)	Gap 1	71%
Total phosphorus	Jacko's West	95%
Suspended solids	Jacko's East	90%

What the readings show

Nitrate fell at Gap 1, while phosphorus and suspended solids fell at the selected Jacko's Dam points. The phosphorus and solids readings were lower by December and remained lower in January. Suspended solids are particles carried in the water.

Selected sampling points, not whole-dam averages. These observations do not isolate the treatment's effect or guarantee the same result at another site.



Jacko's Dam · treatment layout and sampling locations.

Your questions, answered.

Practical points for your course's water-management plan.



On-site water monitoring.

Can I irrigate turf with treated water?

PBE is a prebiotic treatment, not an algaecide or herbicide. It is intended to support bacterial activity and make nutrients available for biological use.

Monitor turf growth over time alongside irrigation-water quality. Assess any growth benefit under your course conditions rather than assume it will occur.

What about blue-green algae?

PBE and live bacteria are intended to reduce the nutrients available to blue-green algae (cyanobacteria). Some stubborn species may remain at reduced levels rather than disappear completely.

Keep monitoring. Reduced growth does not mean the water is free of toxins. A plan may include compatible ultrasonics.

What about fish and wildlife?

Ask us about PBE applications in prawn farming, pearl farming and other aquaculture. We'll discuss the treatment in relation to your site, its fish and other wildlife.

Suitability needs to be considered for the species and conditions involved.

Can other treatments continue?

Chemical treatments that are incompatible with PBE should be stopped before the programme begins. Agree which products to stop and when with Algae Control Australia.

Compatible non-cavitating ultrasonics—units that avoid collapsing bubbles—may be considered within the plan.

Let's discuss your course's water.

Josh Shedden | Amacron Golf & Turf

0447 233 143 · josh.shedden@amacrongolf.com.au