

# PHOSLOCK IMPROVES WATER QUALITY WITH SCIENCE-BASED SOLUTION

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Phoslock's water treatment technologies and bespoke engineering solutions are helping authorities around the world to maintain healthy water environments.

Established in 2002, Phoslock Environmental Technologies (PET) provides innovative water technologies and engineering solutions to manage nutrients and other water pollutants. PET's products are used to manage unhealthy water bodies and promote healthy aquatic environments.

The company's star product is Phoslock. Developed by CSIRO, Australia's national science agency, Phoslock is a lanthanum modified bentonite material that removes excess phosphate from water bodies.

Phoslock works by binding phosphate and forming a new inert mineral called Rhabdophane that becomes part of the natural lake sediments. The safe and permanent elimination of phosphate reduces the growth of harmful algae that can lead to water quality, health and odour issues.

PET uses Phoslock and other products as well as engineering techniques to help water authorities to manage and maintain clean water bodies. The company has applied Phoslock and other remediation products to over 300 water bodies, including in Australia, Europe, the US, South America and Asia.

## Improving water quality in China

More recently, PET has experienced significant growth in China, having deployed its remediation approaches across a number of lakes and water bodies.

A recent example is Xingyun Lake in Yunnan Province. Covering about 3,500 hectares, the lake is one of the famous nine "Plateau Lakes". Due to anthropological influences from industrial and



Xingyun Lake in Yunnan Province, China.

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Lachie McKinnon, CEO, Phoslock Environmental Technologies

agricultural runoff, the phosphorus levels in the lake have increased in recent years. This has resulted in the water quality degrading to worse than Class V.

In July 2019, PET provided a scientifically valid and environmentally safe technology to control and reduce phosphorus levels in the lake to improve the water quality. The treatment and restoration work is ongoing.

In China PET works closely with BHZQ, a subsidiary of Beijing Enterprises Water Group (BEWG), a Hong Kong listed company providing leading water and environment services. PET was introduced to BHZQ during an Austrade water mission to China in 2016. The two organisations signed a strategic collaboration agreement at a ceremony witnessed by senior NSW Government representatives and Austrade in Sydney in May 2017.



Australian Government

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## **Global demand for water quality services**

PET has established a production facility in Changxing (150 kilometres from Shanghai) to support its expansion in China. The facility meets ISO standards for Manufacturing, Environmental Management and Occupation Health and Safety.

PET is seeing a rise in demand globally for its services, having recently won projects in Brazil, the UK, Netherlands and Germany.

‘Fresh water is a natural resource under increasing pressure worldwide as a result of rapid urban and industrial development,’ says Lachie McKinnon, CEO, PET. ‘Phoslock is a unique solution that removes phosphorous in a safe, non-intrusive and cost-effective manner, resulting in significantly improved water quality.’

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