



ASX Code: **PHK**

Share Price: **A\$0.10**

52 Week High: **A\$0.125**

52 Week Low: **A\$0.068**

Issued Shares: **367.9m**

Market Cap: **A\$36.8M**

Address:

Suite 403  
25 Lime Street  
Sydney NSW 2000

Phone: +61 2 8014 7611

Email: [enquiries@phoslock.com.au](mailto:enquiries@phoslock.com.au)

[www.phoslock.com.au](http://www.phoslock.com.au)

[www.phoslock.eu](http://www.phoslock.eu)

[www.phoslock.com.br](http://www.phoslock.com.br)

[www.phoslock.cn](http://www.phoslock.cn)

PHK BLOG on Water Issues:

[www.phoslock.com.au](http://www.phoslock.com.au)

# ASX ANNOUNCEMENT

Friday 28<sup>th</sup> April, 2017

## Business Progress

### Key Points:

- March 2017 quarter sales of \$1.3m – up 110% on pcp
- New 100% owned modern factory near Shanghai with multiple production lines for Phoslock and Zeolite.
- PHK Beijing established as specialist design, engineering, application and maintenance company
- Placement of 30 million shares to Investor Group with significant water expertise to assist PHK expansion in China

## Highlights

Cash receipts from customers for the March 2017 quarter were \$1,119,000 up 29% on *previous corresponding period* (pcp). For the nine months of FY2016-17 cash receipts from customers and government grants are up 34% to \$2.8m.

Sales for the March quarter were \$1.3m ,up 110% on pcp and nine month sales: \$3.3m up 120% on pcp.

The establishment of a multi-purpose manufacturing facility in Changxing, 150km from Shanghai, China. Phoslock production will commence at the rate of 5,000tpa. Factory capacity will initially be 15,000tpa with the ability to rise to 45,000tpa. Operating costs are expected to be lower than the current toll treatment plant.

Formation of Phoslock Beijing, being the specialist team focussing on end-to-end design, engineering, application and maintenance for water remediation of river, canal and lake projects throughout China.

A placement of 30 million PHK shares, raising \$2.1m, to Chinese Investor Group with significant water industry expertise to grow PHK's China business.

Application of Phoslock to Lake Pampulha in Brazil is continuing with more than 500 tonnes of product applied to the lake since the application began in mid-2016. A further 700 tonnes are expected to be applied to the lake before the end of 2017.

Current contracted work, and contracts expected to be received, to be completed during the balance of calendar 2017, is in excess of \$7 million. This covers projects in Brazil, Canada, U.S., China, Germany & Australia

The Company is currently forecasting full year sales revenue of \$4.5-5 million, but this could be exceeded if several pipeline projects proceed in the April to June 2017 quarter. Three large projects (in the \$1-5 million range) were added to the pipeline during the quarter.

## China

PHK advised on 11 April, 2017 that it is in the final stage of establishing a multi-purpose Chinese manufacturing facility in Changxing, Zhejiang province, 150km from Shanghai. Phoslock production will commence at the rate of 5,000tpa. Factory capacity will initially be 15,000tpa with the ability to rise to 45,000tpa. Operating costs are expected to be lower than the current toll treatment plant. Ultimate costs of production will be determined by the product volume.

This is the first time that PHK will have complete control over all aspects of the manufacturing operation. The facility will also manufacture modified zeolite, which is used to remediate nitrogen. New water treatment products are currently in development.



*Phoslock Changxing manufacturing facility*

**PHK advised on 10 April, 2017 the formation of a new wholly-owned subsidiary, Phoslock (Beijing) Environment Engineering Technology Co. Ltd, to focus on engineering solutions for polluted Chinese water bodies.**

Phoslock Beijing will undertake end-to-end design, engineering, application and maintenance for water remediation of river, canal and lake projects throughout China.

This is a substantial broadening of the Company's current business base and will allow PHK to undertake a broader array of projects, including services and materials. Phoslock Beijing has recruited an experienced team of water engineering and implementation specialists. They bring with them existing projects and a large network of industry and government contacts.

PHK will issue the Phoslock Beijing management team 20 million Performance Options at 10.5c, which will only be paid for and vest if Phoslock Beijing (including sales booked through Phoslock Shanghai) records commercial sales of no less than rmb 100,000,000 (approx. A\$20,000,000) or net profit before tax of not less than rmb 16,000,000 (approx. A\$3,000,000) in aggregate for the period to 30 June 2019.

PHK also announced that it was making a placement of 30 million shares at 7 cents per share to China Environmental Corporation (CEC). This Company, owned by senior Chinese water industry executives will, together with PHK, develop its business in China and potentially internationally.

Additionally, CEC will receive 30 million Performance Options on the same terms as those issued to Phoslock Beijing executives. On completion of the share placement, CEC will be invited to appoint one director to the PHK Board.

The Share Placement will result in CEC owning 7.6% of PHK. PHK will receive \$2.1 million in two equal tranches on 10 May and 25 May, 2017. The issuing of the Performance Options will be subject to a Shareholder Meeting to be held in early June. A Notice of Meeting will be sent to shareholders in early May.

## Europe

Sales in Europe since January were \$500,000 with seven applications been undertaken in England, Scotland, Germany, Austria and Belgium during the past three months. Another application is due to take place in the Netherlands in coming weeks.

As reported previously, Phoslock was applied to a lake located in the grounds of one of the England's most well-known stately homes in late February, while three lakes within the City of Brussels were treated in March. This project was part of a public tender to restore urban lakes that was won by Phoslock Europe.



The high level of application activity has continued into April in Europe, with applications having been completed to lakes in Scotland, Austria and Germany.

### **North America**

The Phoslock business in the U.S. continues to grow, with SePRO Corporation reporting a doubling of year-on-year sales between October 2016 and February 2017. New orders received during the quarter and have now been despatched. The distribution of Phoslock through SePRO's nationwide network of preferred applicators continues to be the main marketing channel for Phoslock in U.S., with SePRO reporting a high level of interest in the product among applicators and an increase in the number of companies handling Phoslock.

Additionally, SePRO continues to target larger opportunities for Phoslock in key U.S. regions, including California, Florida and North Carolina. Success in securing any of these opportunities would result in a major ramp up of U.S. sales.

In Canada, the Company continues to work on projects in Quebec, Manitoba, Alberta and British Columbia. A \$500,000 project in Quebec is close to being confirmed and is expected to go ahead this autumn. The projects in the other Provinces are substantially larger in scale.

### **Brazil**

More than 500 tonnes of Phoslock have now been applied to Lake Pampulha, with another 150 tonnes ordered and enroute to Brazil. By the end of 2017, it is expected that almost 1,200 tonnes will have been applied to the lake. Results from the treatment are very positive, with the quarterly monitoring of the lake clearly showing an improvement in the trophic state. Belo Horizonte held a public meeting at the lake on March 22 to report on the results of the treatment to date. City officials reported that all targets of the treatment are being met and that the water quality of the lake is now classified as "Class 3" under the Brazilian classification system. Lakes with Class 3 water quality are considered suitable for recreational sports such as boating and yachting, as well as fishing.



In addition to the ongoing Pampulha project, PHK's Brazilian licensee, Hidroscience Ltd, has been active in the development of the Brazilian market for the treatment of drinking water reservoirs. A new contract has been secured to restore a large, eutrophic reservoir in the northern city of Salvador, while projects are also expected to be secured in the near future in Fortaleza and the national capital of Brasilia. The total value of these drinking water contracts is expected to be in excess of US\$1 million.

## **Production**

PHK is current going through a transition between finishing with its toll treated production and commencing commercial production at its new Changxing factory. PHK will continue to receive toll treated production until June 2017, by which time the Changxing factory should be in full commercial production. Phoslock production will commence at the rate of 5,000tpa. Factory capacity will initially be 15,000tpa with the ability to rise to 45,000tpa. Operating costs are expected to be lower than the current toll treatment plant. Ultimate costs of production will be determined by the product volume. This is the first time that PHK will have complete control over all aspects of the manufacturing operation.

## **Phoslock Patent**

As previously announced, PHK has lodged a Subsequent Patent Application to protect the core technology. The examination and approval of the new patents in some 50 countries (all EU countries are covered by one examination) are currently in progress. Each Patent Office has its own system of dealing with patents, including the speed at which it reviews patents and how comments are provided to applicants.

The most recent update from our U.S. Associate was that the U.S Patent Office was reviewing the latest responses to technical issues raised and they believed that they had satisfied all outstanding issues.

## **Financial Commentary**

Cash receipts from customers and government grants for the December quarter were \$1,119,000. This takes cash receipts for the 9 months to 31 March 2017 to \$2.8m versus \$2.1m pcp.

Cash costs, excluding inventory purchases and interest and R&D, were \$679,000 (\$652,000 in December 2016 quarter). Product purchases for the quarter were \$613,000 and nearly \$2.3 million for the FY2016-17 nine months.

As at 31 March, 2017 the Company had cash on hand of \$658,000. In addition, receivables/debtors were over \$1,000,000 and inventories \$1,100,000 (at cost).

On 11 April, 2017 PHK announced a placement of 30 million PHK shares to China Investor Group with significant water industry contacts able to assist PHK grow its China business. This will raise \$2.1 million which will be used to fund a number of projects including Changxing factory; Chinese sales & marketing and inventory/ debtor working capital.

**Mr Laurence Freedman AM**  
Chairman

**Mr Robert Schuitema**  
Managing Director

### ***For more information please contact:***

**Mr Laurence Freedman AM** – Chairman; Phone: + 61 (02) 8999 1999  
**Mr Robert Schuitema** – Managing Director; Phone: +61 (02) 8014 7611

**Mr Michael Kotowicz** – Investor Relations  
Wentworth Place Group  
Phone: + 61 (02) 9199 8010    Mob: 0416 233 145

## PHOSLOCK WATER SOLUTIONS LIMITED (PHK)

PHK produces *PHOSLOCK*, a patented technology which was developed by the Commonwealth Scientific and Industrial Research Organisation (“CSIRO”). PHK has lodged a subsequent patent application to protect the core *PHOSLOCK* technology which is in an advanced stage of being granted in some 50 countries, with the intention of extending the core *PHOSLOCK* technology to 2033.

PHK is headquartered in Sydney, Australia and has offices in Brisbane, Beijing (being opened), Shanghai & Changxing, China and Bremen, Germany covering Europe and South America. PHK is represented by licensees, distributors and agents in ten other countries including SePRO Corporation in the United States and HidroScience in Brazil.

PHK recently forming a new company, Phoslock (Beijing) Environment Engineering Technology Co., Ltd that will focus on both engineering solutions for water environment projects as well use of water remediation products such as Phoslock, zeolites and other solutions in China. Phoslock Beijing will be able to undertake design, engineering, implementation and use of remediation materials for river, canal and lake projects in China. This is a significant broadening of the current PHK business base and will allow it to undertake a broader array of projects in China, supplying services and materials. PHK has also signed six agreements in China with a number of environmental companies to gain access to its clients for work on lake, river and canal remediation projects.

*PHOSLOCK* is a certified NSF/ANSI Standard 60 product - North American Drinking Water (see websites [ansi.org](http://ansi.org) and [scc.ca](http://scc.ca)). This certification enables *PHOSLOCK* to be applied to water bodies used for human consumption.

*PHOSLOCK* has been certified by Chinese Research Academy of Environmental Sciences (CRAES). *PHOSLOCK* is classified as a general environmental substance. It is neither hazardous nor harmful to the environment. *PHOSLOCK* has low risk to hydro ecological system.



**North America**



**China**

**Phoslock Water Solutions Limited is listed on the Australian Stock Exchange (ASX Code: PHK).**

For more information about *PHOSLOCK* Water Solutions and *PHOSLOCK* please visit our websites: [www.PHOSLOCK.com.au](http://www.PHOSLOCK.com.au) or [www.PHOSLOCK.eu](http://www.PHOSLOCK.eu) (Spanish, Italian, Dutch and German) or [www.PHOSLOCK.com.br](http://www.PHOSLOCK.com.br) (Portuguese) or [www.PHOSLOCK.cn](http://www.PHOSLOCK.cn) (Chinese).

***PHOSLOCK* BLOG** on *PHOSLOCK* news and current Water Issues – see [www.PHOSLOCK.com.au](http://www.PHOSLOCK.com.au) and look for *PHOSLOCK* BLOG icon in top right corner of the Home Page.

## **ABOUT PHOSLOCK – the Product**

*PHOSLOCK* is a unique water treatment product which binds phosphorus in water bodies such as lakes and dams. It provides a protective permeable layer to sediments, permanently preventing the re-release of phosphorus.

Retention of phosphorus reduces the level of algae by depriving it of nutrients. This in turn improves water quality, both for human use and aquatic life as well as preventing and controlling Harmful Algal Blooms (HAB).

*PHOSLOCK* is primarily used as an in-water solution for lakes, drinking water reservoirs and other recreational water bodies. It is also used as a preventative product to absorb phosphorus before it is transported into water bodies by being applied in storm water basins and inflow channels, rivers and canals.

*PHOSLOCK* is approved for use in North American Drinking Water Reservoirs via NSF/ANSI Standard 60 Certification. This certifies that *PHOSLOCK* is safe for use in drinking water.

*PHOSLOCK* has been certified by Chinese Research Academy of Environmental Sciences (CRAES). *PHOSLOCK* is classified as a general environmental substance. It is neither hazardous nor harmful to the environment. *PHOSLOCK* has low risk to hydro ecological system.

*PHOSLOCK* has been used on many high profile water bodies in Europe/UK, North America and Australia. To date over 300 initial and follow-up applications have been successfully made.

Over 50 peer reviewed scientific and technical papers, have been published on *PHOSLOCK* in leading scientific journals. For access: [www.PHOSLOCK.com.au](http://www.PHOSLOCK.com.au)