

Melbourne, 5 July 2016

# **Quarterly Activities Report - June 2016**

Clean TeQ Holdings Limited ACN: 127 457 916 (ASX: CLQ)

#### **Corporate Information:**

437.1M ordinary shares 37.5M unlisted options 2.6M performance rights \$7.2M cash at bank

#### **Directors:**

Executive Chairman Sam Riggall

Executive Director Peter Voigt

Non-Executive Director Eric Finlayson

Non-Executive Director Roger Harley

Non-Executive Director lan Knight

# **Company Secretary:** Melanie Leydin

## Contact Details:

Ferntree Business Park 2 Acacia Place Notting Hill VIC 3168

PO Box 227 Mulgrave VIC 3170

P: +61(0)3 9797 6700
F: +61(0)3 9706 8344
E: <u>info@cleanteq.com</u>
W: <u>www.cleanteq.com</u>

# **Highlights**

- Ground-breaking Chinese water joint venture established
- \$4.0 million placement to institutional investors
- Syerston Feasibility Study due for completion in July 2016
- \$1.05 million cash rebate received for eligible research and development expenditure in FY2015

## **Clean TeQ Overview**

Clean TeQ Holdings Limited (**Clean TeQ** or **Company**) is a leader in environmental innovation. Our vision is to create a globally significant business which is focused on providing clean solutions to a range of industries using our proprietary Clean-iX® continuous ion exchange technology. We are focused on the markets and ventures where our unique technology is best placed to unlock significant long term value for shareholders – metals recovery and industrial water purification.

**Metals Recovery** – The Company's Clean-iX® Continuous Ion Exchange technology is an innovative hydrometallurgical process for the extraction and purification of a range of valuable metals from slurries and solutions that are not amenable to conventional separation.

Clean TeQ owns the Syerston Scandium Project in NSW. Through the development of Syerston, Clean TeQ has the opportunity to become the leading, and lowest cost, supplier of scandium to the global transportation industry.

Water Purification – Clean TeQ's Continuous Ionic Filtration & Exchange (CIF®) and Macroporous Polymer Adsorption (MPA®) resin technologies provide cost effective solutions to the mining, oil and gas and municipal industries for the treatment of waste waters. Our technologies are designed to cope with the most demanding waters to provide best in class performance in water recovery and operability.

# **Clean TeQ Metals**

## **Syerston Scandium Project Feasibility Study**

Clean TeQ is the 100% owner of the Syerston Scandium Project in central New South Wales. During the March 2016 quarter, activities were primarily focused on the ongoing feasibility study works for the project including finalisation of the flow-sheet design for the processing facilities and commencement of detailed plant and equipment costing.

Notwithstanding a minor delay, the feasibility study is now being finalised with results expected to be released to market by the end of July 2016.

#### **Syerston Scandium Marketing**

A key focus for the Company is securing offtake contracts to support the levels of scandium oxide production proposed in the Scoping Study. Clean TeQ marketing personnel are working with a number of counterparties in the aerospace and solid oxide fuel cell industries with the aim of securing scandium oxide offtake contracts. In addition to these opportunities, a number of offtake opportunities are also being pursued in the automotive, marine and space sectors using Al-Sc sheet, welding wire, extruded parts and powder, which are expected to provide other additional sources of offtake in the future.



Clean TeQ's proprietary Resin-In-Pulp (cRIP) process demonstration plant

### Mt Morgan Gold/Copper Project

Clean TeQ and Carbine Resources Limited (ASX: CRB) entered into a memorandum of understanding in November 2014 to investigate commercial avenues for the companies to work together for the development of the Mount Morgan Gold/Copper project. As part of the Mt Morgan Feasibility Study process, Clean TeQ is working with Carbine to integrate the Clean-iX® process into the Mt Morgan

processing flow sheet to recover copper, reducing cyanide consumption in the gold circuit, as well as producing a valuable copper by-product to improve overall project economics.

#### ISK

During CY15 the Company completed a campaign on Clean TeQ's Clean-iX® scandium recovery pilot plant at Ishihara Sangyo Kaisha Ltd's (ISK) titanium dioxide facility in Yokkaichi, Japan. The piloting work confirmed Clean TeQ's ion-exchange extraction processes' ability to recover low concentrations of scandium from intermediate process streams. In spite of the technical success of the pilot program, during the quarter ISK advised the Company that they have elected not to pursue the development of a scandium business at this time.

## **Clean TeQ Water**

The Clean TeQ Water Division continues to promote our Continuous Ion Exchange technology with a particular emphasis on the Chinese water market.

During the quarter the Clean TeQ group executed a binding agreement with Jinzhong Hoyo Municipal Urban Investment & Construction Co., Ltd (Hoyo) to form a Chinese incorporated joint venture (JV Company) which will pursue water treatment opportunities in China's Shanxi Province utilising Clean TeQ's water purification technology.

Clean TeQ and Hoyo have also reached in-principle agreement on the terms on which the JV Company will build, own and operate a Clean TeQ Continuous Ionic Filtration (CIF®) water treatment plant at an existing wastewater treatment facility owned and operated by Qixian Hoyo Waste Water Treatment Co., Ltd (Qixian) in Shanxi Province.

Hoyo and Qixian are both members of the Nanjing Hoyo Municipal Utilities Investment Administration Group (**Hoyo Group**). Hoyo Group is a large diversified private Chinese conglomerate which is active in a range of industries including pipeline construction, operation of urban sewage and waste water treatment plants, construction, aviation and manufacturing of agricultural machinery.

The JV Company, Shanxi Hoyo Clean TeQ Environmental Company Ltd, is to be owned 50:50 by Clean TeQ and Hoyo and will be capitalised through equity contributions of US\$600,000 from each of the parties. Clean TeQ will fund its share of the equity contributions from cash reserves currently on hand. The start-up capital contributions are expected to be sufficient to build the first project and fund modest overheads of the JV Company until it becomes cashflow positive.







Hoyo municipal water facilities in China

Clean TeQ and Hoyo have also reached in-principle agreement on the terms for the JV Company's initial project contract, which is to build, own and operate a CIF® water treatment plant to treat up to 13,000 tonnes of effluent per day for a 20 year period. The proposed project contract provides for the JV Company to be paid a service fee per tonne of water treated, subject to a minimum payment for 9,000 tonnes per day. Clean TeQ has actively pursued a build, own and operate business model, targeting generation of long term sustainable cashflows and favourable economic returns.

Design and engineering of the plant has commenced, with procurement of materials and construction of the plant anticipated to begin in October 2016 subject to the following:

- 1) Completion of the establishment and registration of the JV Company in China;
- 2) Negotiation and execution by JV Company and Qixian of the final binding project contract;
- 3) Obtaining standard Chinese regulatory approvals (construction, environmental etc); and,
- 4) The parties making the required equity contributions to fund the JV Company.

Utilising Clean TeQ's innovative continuous ion exchange technology, the proposed CIF® plant will upgrade treated effluent from an existing wastewater treatment plant to surface discharge quality water for beneficial use in a recreational water park.

Although the Company is highly focused on the delivery of this initial contract/project, a pipeline of other potential projects, in China and elsewhere, is also being developed.

## Corporate

As at 30 June 2016 cash at bank was \$7.2 million with \$0.4 million additional cash on deposit securing performance guarantees.

During the quarter the Company completed a private placement of approximately 19 million new shares at an issue price of \$0.21 per share to raise proceeds of \$4.0 million. The shares were subscribed for by two institutional investors based in Sydney and Hong Kong. Proceeds will be used to strengthen Clean TeQ's balance sheet and provide additional working capital for ongoing Syerston marketing activities and water business development.

The Company received a further \$1.05 million cash rebate from the Australian Tax Office for eligible research and development expenditure in FY2015. The Company anticipates that a significant proportion of FY2015 and FY2016 expenditure, including a large proportion of Syerston testwork and feasibility studies, will also be eligible for the 45% refundable tax offset.

### For more information about Clean TeQ contact:

Sam Riggall, Executive Chairman or Ben Stockdale, CFO +61 3 9797 6700

**About Clean TeQ Holdings Limited (ASX: CLQ)** – Based in Melbourne, Clean TeQ, using its proprietary Clean-iX® continuous ion exchange technology, is a leader in metal recovery and industrial water treatment.

For more information about Clean TeQ please visit the Company's website at www.cleanteq.com.

This release may contain forward-looking statements. The actual results could differ materially from a conclusion, forecast or projection in the forward-looking information. Certain material factors or assumptions were applied in drawing a conclusion or making a forecast or projection as reflected in the forward-looking information.