8 August 2018

JDCPHOSPHATE SUCCESSFULLY PRODUCES HIGH-QUALITY SUPER-PHOSPHORIC ACID

HIGHLIGHTS

- **JDCPhosphate demonstration plant successfully produces high-quality super-phosphoric acid from low-quality phosphate rock tailings**
- **Phosphate rock tailings containing about 14% phosphate as P_2O_5 were used to produce super-phosphoric acid at 68% P_2O_5 concentration**
- **Technology is potentially applicable to Avenira's Baobab and Wonarah projects**

Avenira Limited (Avenira or the Company, ASX: AEV) is pleased to provide an update regarding JDCPhosphate, Inc. (JDC) in which Avenira has a minority holding. Avenira has exclusive licence rights to utilise JDC's Improved Hard Process (IHP) technology in Australia and Senegal for an extended period of time.

Since commissioning its redesigned demonstration plant at its Fort Meade, Florida facility, JDC has successfully used its proprietary IHP technology to produce high-quality super-phosphoric acid (SPA) using low-quality phosphate rock tailings.

Avenira sees the development of IHP to produce phosphoric acid for agricultural and industrial uses as one of the most significant advancements in many decades for the phosphate industry. The patented technology is a kiln-based process that avoids direct acidulation of phosphate rock, minimising the amount of waste and completely avoiding phosphogypsum by-production, as IHP co-produces a commercially useful aggregate for construction and road building instead, called J-Rox.

In recent operations at its demonstration plant, JDC operated its entire process continuously – including feed preparation and agglomeration, induration, reduction, oxidation, and acid production – to produce super-phosphoric acid using low-quality phosphate rock waste tailings from local mining operations in Florida combined with clay and petroleum coke. The phosphate raw material contained about 14% phosphate as P_2O_5, with high levels of silica and other impurities, including in particular magnesium oxide, elevated levels of which are problematic in the traditional wet sulfuric acid attack process.

The super-phosphoric acid produced in the JDC demonstration plant reached a concentration of 68% P_2O_5 with less than 2.5% impurities, including less than 0.3% CaO, 0.2% MgO, 0.3% SO_4, 1.0% Fe_2O_3, 0.1% F and 0.1% Al_2O_3.

AVENIRA LIMITED ABN 48 116 296 541
Suite 19, 100 Hay Street, Subiaco, Western Australia 6008
PO Box 1704 West Perth WA 6872
+61 8 9264 7000
frontdesk@avenira.com

FOR FURTHER INFORMATION:
Mr Louis Calvarin
Managing Director and CEO, Avenira Limited
Mr Rod Wheatley
CFO and Company Secretary, Avenira Limited

Over the next several months, following this positive result, JDC is planning to further upgrade its commercial demonstration plant for on-demand and sustained operations. By early 2019 the Fort Meade plant will be capable of testing various qualities of phosphate ore raw material, allowing potential licensees to validate the process for the phosphate ore and silica sources they have available, and will then complete its process design engineering for commercial-scale applications of the IHP technology.

Avenira sees the IHP technology as potentially applicable to both its Baobab (Senegal) and Wonarah (Australia) projects.

Avenira Managing Director Louis Calvarin said, *"This successful production of high-quality super-phosphoric acid from low quality phosphate rock tailings at JDC's demonstration plant adds to Avenira's confidence in this emerging process as a promising avenue to add further value to the phosphate rock operations at our Baobab project in Senegal in the future, as well as at Wonarah in the Northern Territory.*

We look forward to continuing our relationship with JDC as we look at how we can apply this revolutionary technology to our own projects."

For additional information on JDC and the IHP technology please visit JDCPhosphate's website at *www.jdcphosphate.com.*

Louis Calvarin
Managing Director

About Avenira Limited

Avenira Limited (ASX: AEV) is a phosphate rock mining company with a vision to develop a portfolio of agricultural minerals and production assets that will build long term shareholder value by supplying to the world the agricultural nutrients critical to global food security.

Our flagship asset is the 80% owned Baobab Phosphate Project located in Senegal, West Africa. During the 2017 calendar year, the Company established its strategic plan for the Baobab Project, focused first on a major expansion and upgrade of the beneficiation plant at Baobab's Gadde Bissik mine to bring it to a profitable operational higher level, and subsequently on implementing next-step investments towards its longer-term objective of downstream integration.

Phosphate Concentrate Production

Gadde Bissik Pit

Under the plan to expand and upgrade the existing ore beneficiation unit the Company engaged engineering firm Hatch to conduct a conceptual study which delivered positive results detailed in the Company's announcement of 17 October 2017. Following the positive conceptual study and successful completion of its Entitlement Offer and Placement capital raising, the Company has embarked on the next phases of its strategic plan, to include more detailed engineering work, approvals and financing. The Company has appointed Wood Group PLC as its lead Feasibility Study engineering consultants.

The Company also owns approximately 7% interest in JDCPhosphate Inc., a private company in the USA focused on the development of the Improved Hard Process (IHP), a potentially game-changing proprietary high-grade phosphoric acid production technology. Avenira has exclusive license rights to use the IHP in Australia and Senegal once commercially proven.

The Company's other asset is the 100% owned Wonarah Phosphate Project in the Northern Territory. The project forms part of the Company's long-term strategy and will be enabled by the IHP process. Wonarah is one of the largest known phosphate deposits in Australia.

For further information on the company please refer to the company's website at www.avenira.com.