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URANIUM EQUITIES LIMITED ACN 009 799 553

URANIUM EQUITIES

The Company Announcement Officer
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PhosEnergy Demonstration Plant Successfully Extracts Uranium from Fertiliser Streams

Another key step towards commercialisation of ground-breaking technology

Highlights

- PhosEnergy Process Demonstration Plant **performs well on multiple phosphate streams**
- **High uranium recoveries (>90 per cent)** consistently achieved during steady state operations
- Operations **confirm operating cost assumptions**
- **Engineering study** planned to commence in December Quarter

Uranium Equities (ASX: UEQ) is pleased to advise that it has successfully completed the first operating phase of its PhosEnergy Demonstration Plant in the USA, marking another step towards commercialisation of this ground-breaking technology.

Demonstration Plant Operations

A transportable Demonstration Plant, designed to gather additional operating and capital cost information for the commercialisation of the process, was commissioned in May 2012 in the USA (*Figure 1*).

Four, 10 day tests were completed from June to August 2012 on phosphate streams from two different fertiliser facilities. The PhosEnergy Process proved effective on a demonstration scale with multiple cycles of unit operations showing exceptional results.

All analytical results have now been received with key outcomes of the work to date being:

- Consistently high uranium recovery (greater than 90 per cent) from the phosphate stream during steady-state operation;
- No deleterious build-up of impurities in the extraction media across multiple cycles;
- Chemical and reagent consumptions within expected range;
- Purification and concentration of uranium is achievable without significant uranium losses;
- The chemistry of the phosphate stream is unaffected except for the removal of uranium;
- A concentrated product was shipped to a uranium production facility where a saleable product can be produced.

Our Strengths

- Breakthrough PhosEnergy Process
- Extensive exploration portfolio >24,000km^2
- Multiple near term growth opportunities

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Uranium Equities estimates the cash operating cost of uranium production employing the PhosEnergy Process to be US$20-25 per pound of U_3O_8, with a capital intensity of $100 per pound ($U_3O_8$) of annualised nameplate capacity. These estimates are based on phosphate streams from a 1Mtpa P_2O_5 fertiliser facility operating in the USA and include a 40 per cent contingency.

Figure 1 – The PhosEnergy Demonstration Plant

The Demonstration Plant operation was a jointly staffed effort between Cameco and Uranium Equities with Cameco lending significant resources to the project.

UEQ's Managing Director, Bryn Jones, said "*The successful operation of the Demonstration Plant is a major milestone in the commercialisation of the PhosEnergy Process. The next step is an Engineering Study to better define CAPEX and OPEX and allow a robust business case to be built for uranium recovery from phosphate fertiliser streams."*

"Accessing by-product uranium production using the PhosEnergy Process provides an opportunity which is low-cost, long-life and short lead time compared to the current pipeline of uranium projects worldwide" he added.

Next Steps

The design criteria derived from the Demonstration Plant runs will be fed into an Engineering Study planned to commence in the December Quarter of 2012 to further increase confidence in the capital and operating cost estimates.

Further Demonstration Plant operations are planned to test the robustness of the PhosEnergy Process on additional phosphate streams.

The Process

The PhosEnergy Process is a technology for the extraction of uranium from phosphate streams produced in the production of phosphate-based fertilisers. UEQ and leading global uranium company Cameco Corporation are jointly commercialising the technology under a strategic alliance in which Cameco has the right to earn 73 per cent of the PhosEnergy Process.

A brief history of uranium recovery from phosphate fertiliser streams:

- Extraction of uranium from phosphates was a major source of U_3O_8 in the 1980s with more than 5M lb/annum U_3O_8 extracted at the peak;
- The historical solvent extraction process was capital intensive with high operating cost;
- By-product production ceased in the 1990s due to unsustainable cost structures in a low uranium price environment (<$10/lb U_3O_8);
- Uranium from phosphates now represents a large stranded resource waiting to be developed.

Uranium Equities believes that the PhosEnergy Process provides the breakthrough technology required to rejuvenate uranium recovery as a by-product from the phosphate fertiliser industry.

Yours faithfully,

Bryn Jones
Managing Director

Forward Looking Statements

This announcement may include statements that could be deemed "forward-looking statements". Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those expected in the forward-looking statements or not take place at all.

About Uranium Equities

Uranium Equities Limited (UEQ) has two main areas of focus: The development of the PhosEnergy Process; and exploration activities directed at high quality exploration assets covering more than 24,000km^2 in a number of Australian states and territories and various deposit styles.

The PhosEnergy Process is an innovative patented process for the extraction of uranium as a by-product from phosphate in the production of phosphate based fertilisers.

The global annual production potential of uranium from the phosphate industry is in the order of 20 Mlbs U_3O_8. This quantity of uranium is mined in phosphate ores but not recovered annually on a worldwide basis. The major phosphate based fertiliser producers are located in Northern Africa, North America and Asia.

The PhosEnergy Process has been proven to demonstration plant scale with results establishing a robust process capable of achieving high levels of uranium recovery at the lower end of the cost curve.

The Nabarlek Project provides a rare near mine exploration opportunity surrounding the historic Nabarlek Uranium Deposit (24 Mlbs @ 1.84% U_3O_8). The deposit lies within an extensive uranium mineral system which extends over more than 50 square kilometres within the Mineral Lease and the surrounding tenements. The mineral system which contains widespread anomalous uranium geochemistry and ore grade mineralisation at several locations remains largely untested.