ASX ANNOUNCEMENT

23 September 2024

ChemX Granted HiPurA® HPA New Zealand Patent and Pilot Plant Progress

- **Grant of HiPurA® Patent in New Zealand**
- **ChemX receives A$191,935 (Tranche 2) via R&D tax incentive loan facility**
- **HPA Pilot Plant Progress**

ChemX Materials (**ASX:CMX)** (**ChemX** or **the Company**), an Australian high purity critical materials company and 100%-owner of the HiPurA® patented process to produce High Purity Alumina (HPA) is pleased to announce it has received notice of grant for its innovative HiPurA® patent within New Zealand from the New Zealand Intellectual Property Office (NZIPO).

This patent follows granting of the Australian Patent in February 2024[1] and further solidifies ChemX's competitive edge in becoming a key producer of 4N (99.99%) and 5N (99.999%) HPA within Australasia. Further international jurisdictions are pending and ChemX is working with its patent advisors to have these granted.

Chief Executive Officer, Peter Lee said:

"Patent awards continue to underpin the global rollout of ChemX's HiPurA® technology and the Company looks forward to accelerating its commercialisation strategy in the key markets including LEDs, semiconductors and electrical vehicles following the successful commissioning of the Pilot Plant and off take negotiations which have begun."

"Importantly, ChemX expects additional international patents to awarded over time."

Tranche 2 of R&D funding Received

ChemX's HiPurA® Pilot Plant is being built in O'Connor, Western Australia and the Company pleased to advise it has also received A$191,935 (tranche 2) via Radium Capital loan facility (R&D funding method) secured against the estimated R&D Tax incentive refund for FY24.

1. ASX 5 February 2024, ChemX Granted Australian Patent for HiPurA HPA

Radium Capital is a R&D finance provider offering advance access to eligible R&D funds. ChemX Materials' total FY24 eligible tax refund is estimated to be $A552,419, of which ChemX has now received 80% ($441,935). The final 20% (less interest and fees) is to be received in the final quarter of calendar 2024.

Pilot Plant Progress

ChemX previously announced the successful commissioning of the Pilot Plant Leach module, and this remains in a state of operational readiness. Delays have been experienced in the construction of the Solvent Extraction (SX) module due to longer than expected lead times on key process equipment and delivery of electrical infrastructure.

During this period, ChemX has embarked upon increased safety measures including:

- Completing the installation of double containment bunds and additional double walled storage vessels
- Development of enhanced safety systems supporting wireless integrated control with interlocks, alarms, and shutdown/startup automation
- Development of enhanced control capabilities for optimisation of key process parameters including historization and online trend analysis

The above initiatives deliver improved layers of safety with regard to solvent (SX area) management and provide inventory hold points within the process where purity may be quantitatively tested/verified against expected elemental purity before processing further. These cost saving measures negate unnecessary processing of sub-standard interim process batches, build towards key commercial plant design considerations, and unlock advanced process optimisation capabilities.

Figure 1 – ChemX HiPurA® Solvent Extraction (SX) module completed, pending energisation infrastructure installation

ChemX has achieved operational readiness within Precipitation, Drying and Calcination areas and expects Reagent delivery systems to achieve operational readiness status in October 2024. Other key statutory activities including waste-water disposal permitting and chemical storage & handling permitting pre-requisites are in progress and advancing well.

Chief Executive Officer, Peter Lee added:

"Unfortunate delays experienced within key process equipment deliveries and electrical infrastructure works were disappointing for ChemX. Working closely with key vendors we advanced in parallel other modules of the Pilot Plant to achieve operational readiness status."

"Electrical infrastructure installation now determines the critical path for commissioning of the HiPurA® HPA Pilot Plant and ChemX is working with its contractor and suppliers to ensure this delivered as soon as possible.

"The company has increased investment in enhanced process safety and control systems to support permitting of the various licenses linked to commissioning of the HiPurA® Pilot Plant processes.

"A key advantage of the patented HiPurA® process is that it is not tied to mine development and related approvals and can be readily deployed in suitable jurisdictions close to key markets and customers such as the United States, Korea and Japan."

Our internal laboratory is fully commissioned and holds capability to produce results in minutes with resolution down to parts-per-billion (ppb) levels (across 66-elements) and is poised to deliver timely internal analysis to enable rapid iteration of key parameters during Pilot Plant commissioning in the coming months.

This Announcement has been authorised for release by the Board.

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About ChemX Materials (ASX: CMX)

ChemX Materials (ASX:CMX) is an ASX-listed critical materials company developing innovative processing technology to produce high purity alumina for advanced technology and clean energy applications. ChemX Materials' 100% owned, Australian and New Zealand patented HiPurA® process technology offers a low cost and low energy intensity production method to produce high purity alumina (HPA). The Company's vision is to support the clean energy transition through the delivery of high purity materials and technology that provide real solutions to lowering carbon emissions. The Company is currently constructing a 24tpa HiPurA® Pilot Plant in Perth, Western Australia along with a high purity manganese (HPM) Project on the Eyre Peninsula in South Australia.

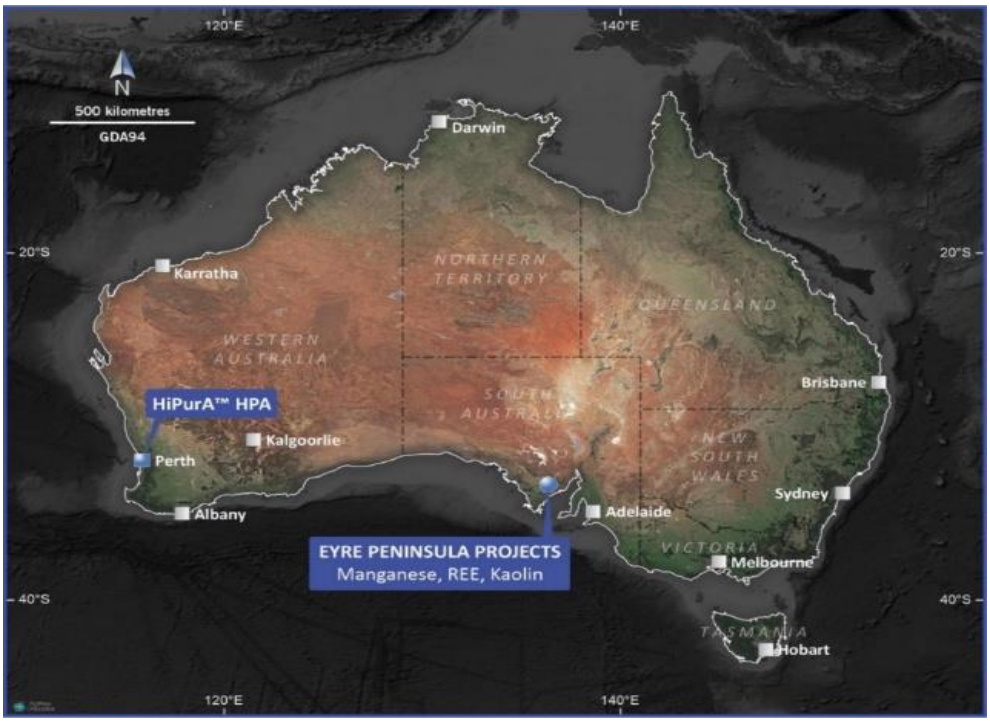

Figure 2 - ChemX Materials' project locations.

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