

ASX ANNOUNCEMENT

12 December 2023

ChemX HPA Project Update

- **ChemX refocusing Micro Plant team on construction and commissioning of high purity alumina (HPA) Pilot Plant which is on track for first commissioning in Q1 CY2024**
- **ChemX's internal laboratory enhanced with addition of new Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES)**
- **Operations Manager Russell Vallis to lead HPA toward 5N in 2024, consulting support services with Dr Nicholas Welham concluded**
- **Current focus on consolidation of Pilot Plant design and expedited procurement**

ChemX Materials Limited (ASX:CMX) (ChemX or the Company), an Australian based high purity critical materials developer, has commenced its transition from Micro Plant operation to Pilot Plant design and delivery.

As announced on 13 November 2023, ChemX's 100%-owned HiPurA® chemical feedstock process has delivered its highest quality result of 39ppm impurities (99.996% purity) across an impressive 66 element spectrum. With this purity capability now consolidated within the HPA design, ChemX has commenced procurement of key longer lead items.

ChemX has realised significant project acceleration with regard to the establishment of its internal laboratory. Having identified external laboratory turnaround times as a key project constraint during Micro Plant operations, ChemX has purchased additional high precision analytical capability with a second high purity instrument to be delivered this week. This new state-of-the-art instrument is Thermofisher's next generation ICP-OES and will provide rapid trace level analysis for control and experimental testwork within Pilot Plant production.

Operations Manager Russell Vallis will continue to lead the HPA development program forward as ChemX advances the pursuit of 5N HPA. Russell has grown in the role since November 2022. The company wishes to acknowledge Dr Welham's contribution to advancing ChemX's 100% owned HiPurA® technology since IPO. With the Micro Plant successfully achieving consistent outcomes above 4N (99.99%) purity and the transition to Pilot Plant engineering and design phase, the consulting support services of Dr Nicholas Welham have been concluded.

ChemX continues to recruit and build the team with the right skills to deliver 5N in 2024 and as announced 13 November, is refocussing the Micro Plant team on construction and commissioning of the HPA Pilot Plant which will generate samples for sales qualification.

Russell Vallis
Operations Manager HPA

20+ years experience, including 13 years in the advanced materials sector, 10 years in project delivery management. Experience in pilot plant & scale up of bespoke chemical processes. Russell holds a BSc (Inorganic and Physical Chemistry) and BE (Materials Engineering) from the University of Western Australia.

**About the HiPurA® 100% owned process**

CMX's HiPurA® process is a disruptive flowsheet which converts aluminous chemical feedstocks through selective refining to HPA. Ultimately, CMX has achieved the delivery of 4N (99.99%) high grade and is working towards 5N (99.999%) HPA products for the electric vehicle battery separator and synthetic sapphire markets, LEDs, semi-conductor and optical lenses.

The HiPurA® process is modular, scalable and independent of direct mine production, which enables ChemX to locate key future production facilities around the world close to customers in a just-in-time customised approach.

This Announcement has been authorised for release by the Board.

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ChemX is an advanced materials company focused on providing high purity critical materials for the battery industry. The Company's vision is to become a leading supplier of sustainable and ethically sourced critical materials to support the global energy transition.

ChemX is applying its high purity expertise to advance its Manganese project located on the Eyre Peninsula in South Australia. Metallurgical testwork has indicated the manganese ore is amenable to upgrade through beneficiation and being processed into a high purity manganese sulphate to supply the Lithium-ion battery industry.

Developed in-house, ChemX's HiPurA® process is capable of producing high purity alumina (HPA) and high purity aluminium cathode precursor salts for lithium-ion batteries. Initial testwork has indicated that the process is low costs and low in energy consumptions, compared to alternative methods. A key competitive advantage is that the HiPurA® process is modular, scalable and is not tied to mine production, with the feedstock being a widely available chemical.

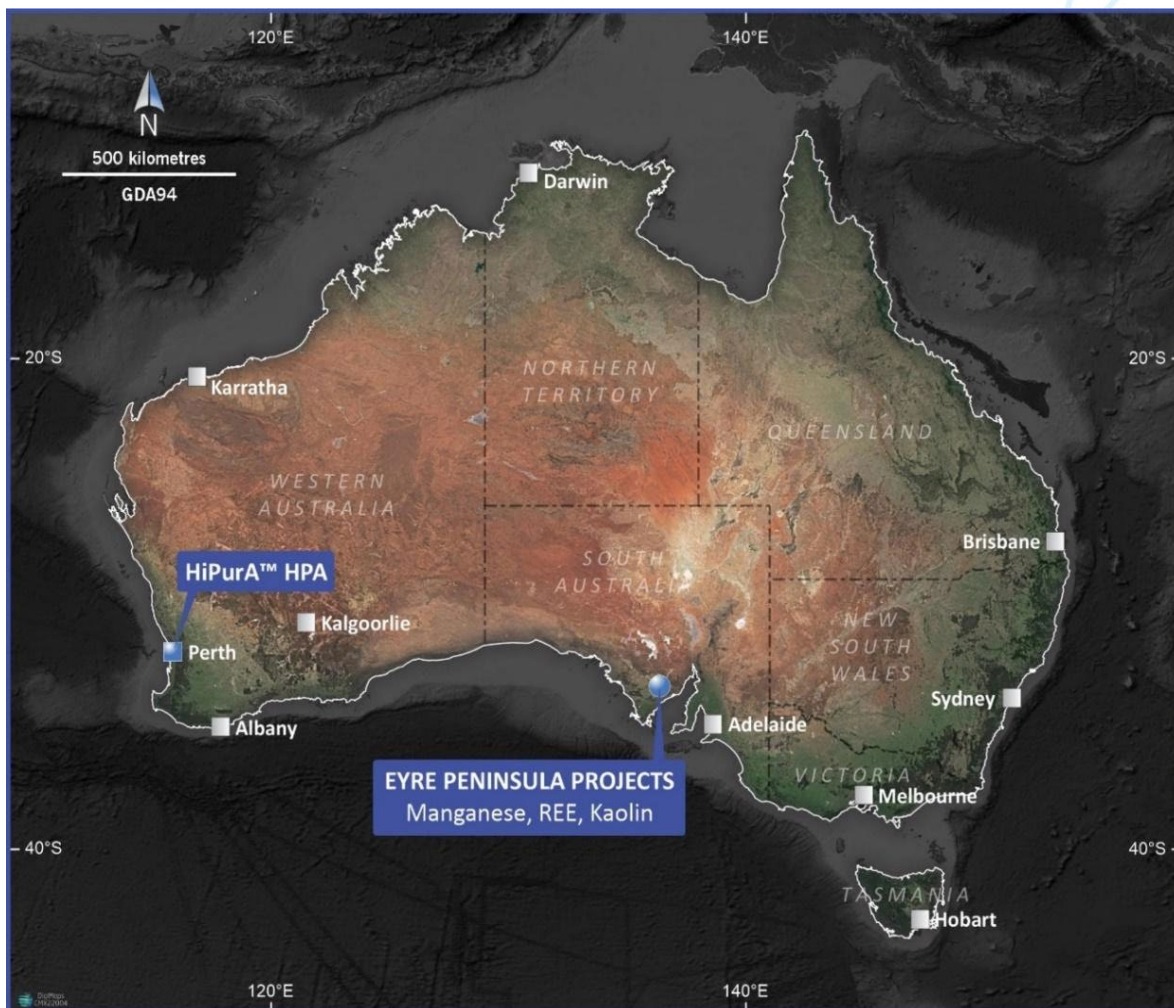


Figure 1: ChemX Project Locations