



ASX ANNOUNCEMENT

5 February 2024

ChemX Granted Australian Patent for HiPurA[®] HPA

- **HiPurA[®] High Purity Alumina (HPA) process granted patent in Australia.**
- **Following the Australian patent award further jurisdictions are expected to follow in subsequent months for ChemX's 100%-owned HPA process.**
- **ChemX's Australian patent protected HPA process provides for a simplified chemical flowsheet to produce HPA which is scalable, modular and able to be deployed in economically competitive jurisdictions.**
- **ChemX is advancing a globally disruptive HPA Process for the battery, LED, semiconductor and synthetic sapphire markets.**

ChemX Materials Limited (ASX:CMX) (ChemX or the Company), an Australian based high purity critical materials developer, has been granted an Australian Patent for its disruptive HPA Processing technology.

The granting of the Australian Patent (Patent no. 2022306695) represents a significant milestone for the HiPurA[®] HPA process. The granted patent protects ChemX's novel HPA process that offers a significant step forward in the production of lower energy HPA¹.

Commenting on the grant of the Australian Patent, ChemX CEO Peter Lee said:

"ChemX is extremely pleased with the award of the Australian patent on our innovative HPA flowsheet and now provides further formal recognition to the uniqueness of our 100%-owned game-changing technology.

With the increased focus in the development of energy efficient critical materials processes in Australia, this patent now places ChemX in a strongly competitive position with regard to ongoing development and the commercialisation of its high purity group of products including synthetic sapphire markets, LEDs, semi-conductor and optical lenses."

The Australian patent provides ChemX with exclusive and legally enforceable commercial rights to the HiPurA[®] HPA process in Australia. The protection provided by the Australian patent system

¹ Compared with traditional HPA production methods such as the hydrolysis of Aluminium alkoxide from aluminium metal or hydrochloric leach methods using kaolin feedstocks.

gives ChemX the right to stop others from manufacturing HPA using the disruptive HiPurA® process.

As announced on 13 November 2023, ChemX's 100%-owned HiPurA® chemical feedstock process has demonstrated its technical success, achieving an impressive result of 39ppm impurities (99.996% purity) across an impressive 66 element spectrum.



The patent grant will allow ChemX to have commercial discussions with interested parties with protection of its intellectual property as it seeks to commercialise the HPA process by exploiting its scalable and modular system in key global battery, LED and synthetic sapphire markets. ChemX is currently accelerating construction of its 24tpa Pilot Plant which will deliver samples for qualification purposes with strategic customers and is on-track for early-stage commissioning in Q2 CY2024.

Figure 1 - ChemX 4N HPA Production

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.

ENDS

For enquiries:

Peter Lee

Chief Executive Officer
ChemX Materials Ltd
Peter@chemxmaterials.com.au
+61 448 874 084

Stephen Strubel

Executive Director and Company Secretary
ChemX Materials Ltd
Stephen@chemxmaterials.com.au
+61 404 400 785

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.

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.

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 amendable to upgrade through beneficiation and being processed into a high purity manganese sulphate to supply the Lithium-ion battery industry.

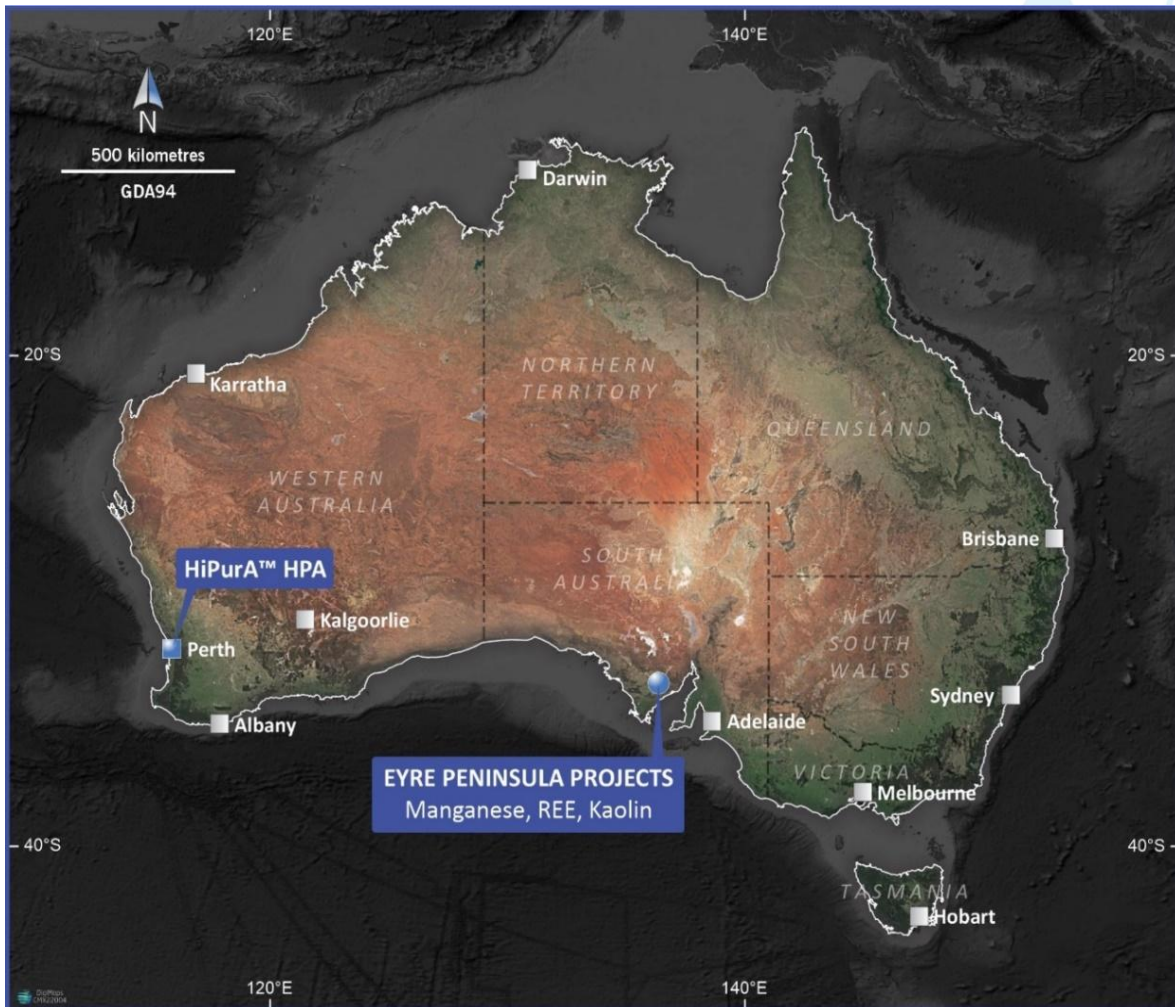


Figure 2: ChemX Project Locations