

ASX ANNOUNCEMENT

28 November 2024

ChemX AGM CEO Address

- **24tpa 4N HPA Pilot Plant poised at 95% Commissioned**
- **Intellectual Property (IP) well advanced for HiPurA® global deployment**

Perth, Western Australia: ChemX Materials Limited (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**) held its Annual General Meeting today at its Registered Office.

Over the past 12 months, ChemX Materials has significantly strengthened its capabilities. Our 100% owned HiPurA® technology has evolved from a novel chemical process to become a producer of 4N (99.99%) High Purity Alumina (HPA) at a Micro Plant scale (1kg/d), and we now hold four patents including Australia, New Zealand, Africa (OAPI) and Eurasia.

HiPurA® Intellectual Property (IP)



Figure 1 - Graphic depiction of ChemX Materials' HiPurA® current and pending intellectual property (IP)

In September 2023, ChemX announced the successful production of HPA with purity exceeding 99.99% (4N). We have since further refined our process, achieving an unprecedented level of 38 ppm impurities – well above the defining 4N threshold of 100 ppm and nearing our 5N target (10 ppm). This achievement positions us for strong potential profitability.

To advance our commercial endeavours, ChemX initiated the next phase of project de-risking: the development of our 24tpa HPA Pilot Plant (100 kg/d). Throughout the past twelve months, we have engaged in comprehensive design, engineering, construction, and staged commissioning of our globally significant HiPurA® technology. We have meticulously integrated key learnings from our Micro Plant operation and established our own internal High Purity Laboratory, which will support efficient and accelerated commissioning once the Pilot Plant is fully constructed.

As of November 2024, the HPA Pilot Plant is 95% complete, with several areas – including Leach, Precipitation, Filtration, Drying, and Calcination – successfully commissioned.

Whilst we have suffered some unforeseen delays in recent months with commissioning, the Team have achieved operational readiness in all areas of the flowsheet with the exception of solvent extraction (SX). Our SX module is awaiting electrical package installation and in parallel we have undertaken deliberate enhancements, including the development of a sophisticated control system. This system will improve safety and enable advanced optimisation functionality, expediting the HiPurA® control system design for the Commercial Plant phase and delivering immediate operational expenditure (Opex) savings through automation.

Our High Purity Manganese (HPM) program achieved a maiden Mineral Resource in September 2023, confirming the potential for manganese-based battery materials to be developed and produced in South Australia.

Looking ahead to 2025, ChemX is poised for an exciting year as we eagerly anticipate patents in Canada, the EU, Korea, Japan, Mexico, and the United States, as well as becoming notable producer of +4N HPA from our Perth-based 24 tpa HiPurA® Pilot Plant once commissioned.

I would like to express my gratitude to our Shareholders, Directors, and the ChemX Team for their ongoing support and patience. High purity outcomes are exponentially harder the purer you go, as every single ingredient put into the process must be managed and carefully monitored for the expected 'purity fingerprint'. The unique HiPurA® process provides the ability to manage the purity pathway at each stage and we look forward to sharing further progress updates and key milestone achievements over the coming months.

ENDS

This Announcement has been authorised for release by the Board.

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About ChemX Materials

ChemX Materials (ASX:CMX) is an Australian company specialising in high purity critical materials. Its ambition is to become a leading, sustainable supplier of high purity materials to the clean energy and advanced technology markets.

High purity alumina

ChemX Materials' 100% owned, Australian patented HiPurA® process provides a new way to produce high purity alumina, that is scalable, modular, independent of mine production and uses significantly less energy than alternate methods. A key advantage of HiPurA® is that it can be located anywhere in the world, providing a just in-time, customised solution for customers.

ChemX Materials has proven HiPurA® can produce above 4N (99.99%) pure high purity alumina at micro plant scale. Following this success, ChemX Materials is pursuing an accelerated commercialisation pathway for HiPurA® through the construction of a 24tpa pilot plant in O'Connor, Western Australia.

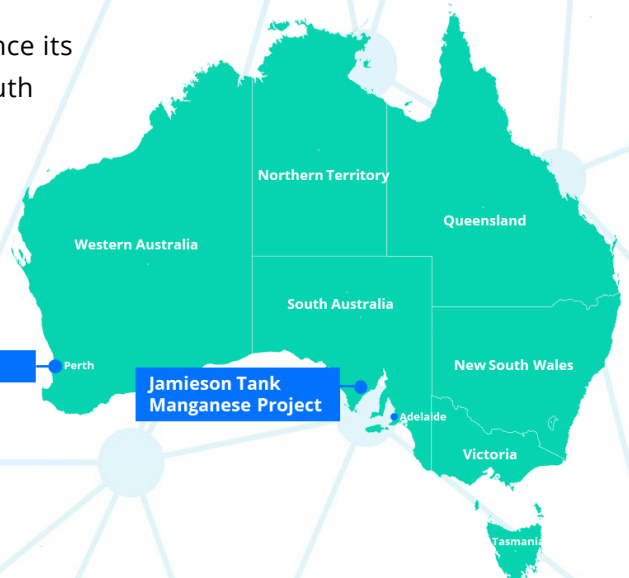
High purity alumina is used in clean energy applications such as lithium-ion batteries, LED lighting and advanced electronics including iPhones, smartwatches, screens, semiconductors and AI.

High purity manganese.

ChemX Materials is applying its high purity expertise to advance its Jamieson Tank Manganese Project (the Project) located in South Australia. In September 2023, a maiden Mineral Resource Estimate (MRE) was announced for the Project. Metallurgical testwork has indicated the manganese ore is amendable to upgrade through beneficiation to produce a high purity manganese sulphate for the lithium-ion battery industry. ChemX Materials continues to evaluate the Project through the progression of an internal scoping study.

HiPurA® - HPA

Jamieson Tank
Manganese Project



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