

ASX ANNOUNCEMENT

30 January 2023

ChemX Materials Ltd December 2022 Quarterly Activities Report

- Work begins on supply of suitable manganese to a proposed battery material refinery hub in Kalgoorlie, Western Australia
- ChemX strengthens executive and non-executive management with significant appointments
- Integrated High Purity Alumina (HPA) Micro Plant facility in Perth commissioned
- Manganese RC Drill Exploration Program Approved for January 2023, designed to Define and Estimate a Maiden Mineral Resource (MRE)
- Metallurgical testing continuing to produce battery-grade manganese from Mt Jamieson ore

ChemX Materials (ASX:CMX) (ChemX or the Company), a materials technology company focused on providing critical materials required for electrification and decarbonisation, is pleased to present its December 2022 quarterly report.

The Company is developing a High Purity Alumina Project in Perth, Western Australia and has two projects on the Eyre Peninsula in South Australia – the Kimba Kaolin - Rare Earth Element (**REE**) Project and the Jamieson Tank Manganese Project.

ChemX Interim Managing Director Stephen Strubel commented: "It has been another busy quarter for ChemX as we again made good progress at all our projects.

"The establishment of an integrated High Purity Alumina facility in Perth was a major milestone for the Company and the Micro Plant was recommissioned. The HPA Pilot Plant, expected to be constructed later this year, will provide further impetus to the HPA project.

"Following the promising assay results we received for manganese at the Eyre Peninsula tenements, we have commenced a second round of drilling at Mt Jamieson with an aim of producing a maiden manganese resource this year."

High Purity Alumina

On 18 August, ChemX confirmed it would build a High Purity Alumina Pilot Plant after a Pre-Feasibility Study (**PFS**) confirmed the viability of the Company's proprietary HiPurA® technology.

The PFS was conducted by engineering firm Primero Group and was based on a 50 tonne per annum (**tpa**) pilot plant requiring a capital expenditure of A\$2.5 million, with an additional contingency of A\$0.41 million. The PFS included data obtained from the Company's HPA Micro Plant commissioning phase and subsequent operation and incorporated several work streams and equipment modifications which led to the design of an appropriately sized pilot plant.

During the December Quarter, ChemX established a dedicated HPA production facility in Perth, Western Australia, after securing a 1200sqm warehouse with adjacent 1200sqm hardstand external space capable of housing both the HPA Micro Plant and HiPurA® HPA Pilot Plant to be constructed in CY2023.

During the quarter, the Micro Plant completed a staged re-commissioning at the new location. ChemX is awaiting final analysis of base HPA samples it has provided to an external testing laboratory.

During the quarter the company increased head count dedicated to the development of the HPA technology in addition to investing in laboratory equipment which will increase efficiency and reduce reliance on external laboratories. The data gained from the Micro Plant will accelerate preliminary design work for the HPA Pilot Plant.

Jamieson Tank and Kimba Projects

ChemX's Eyre Peninsula tenements cover the Kimba Kaolin-REE Project and Jamieson Tank Manganese.

On 27 July 2022, ChemX reported Jamieson Tank had the potential to become a vertically integrated project, with manganese ore to be sourced from its 100% owned tenements on the Eyre Peninsula, South Australia.

ChemX believes it can beneficiate the manganese ore, based on a developed metallurgical testwork program. It reported the first stage of battery grade manganese, or high purity manganese sulphate monohydrate (**HPMSM**) testwork (ASX announcement: 11 May 2022), and the second stage of testwork commenced in the September Quarter.

On 7 October, ChemX announced results from the 2022 aircore drilling campaign at the Kimba Kaolin- REE project which confirmed the potential for a world-class Kaolin deposit to be contained within the tenements, with Kaolin drill hole results assayed at near pure Kaolinite grades, with very low contained deleterious elements.

The Assay results showed excellent kaolin mineralisation and potential within the Kimba Kaolin - REE Project. The kaolin is associated with significant grades of clay hosted REE. As an integral part of the REE study program, the Australian Nuclear Science and Technology Organisation (**ANSTO**) is undertaking a testwork program to determine the optimum conditions for liberating the REE from the clay host materials.

In December 2022, ChemX received Environmental Protection and Rehabilitation (**EPEPR**) approval for a drilling program on the Jamieson Tank project from the South Australian Department of Mining and Energy. The drilling commenced post Q2 end, will comprise 5,000m RC and is expected to be completed in the March Quarter, with the aim of progressing the Manganese Exploration Target (reported to the ASX, 27 July 2022) to estimate a maiden Mineral Resource in accordance with the JORC Code 2012.

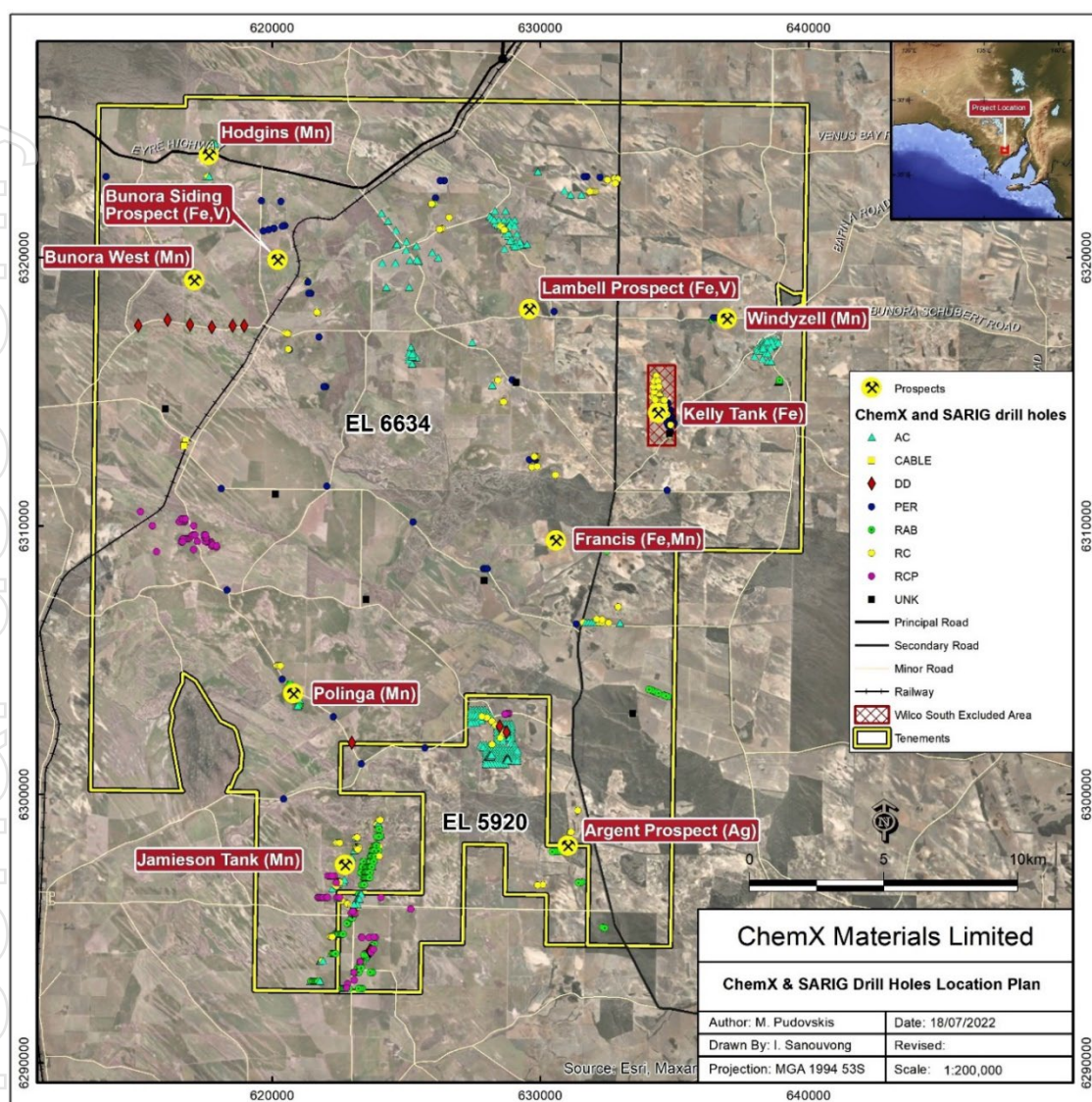


Figure 1 – Key prospects with now consolidated ChemX and SARIG Drill Hole data

In parallel, the Company is continuing with its advanced metallurgical testwork program to produce battery grade manganese sulphate, while actively engaging with potential customers with a view to meeting battery grade product specifications and securing early project participation from suitable downstream high-purity partners.

Corporate

Prior to the start of the December Quarter, ChemX signed a Memorandum of Understanding (**MOU**) with Pure Battery Technologies (**PBT**) which could ultimately lead to ChemX supplying suitable manganese to PBT's proposed battery material hub in Kalgoorlie, Western Australia.

PBT is pursuing the development of a battery cathode active material hub in Kalgoorlie after being granted A\$119.6 million in the Modern Manufacturing Initiative from the Australian Federal Government.

Under the MOU, which is non-exclusive for either party, ChemX and PBT will progress studies and associated works to enable ChemX to supply a suitable manganese product to PBT's Kalgoorlie battery

hub, from the Company's Jamieson Tank Manganese Project. During the quarter ChemX shipped manganese material from its tenements on the Eyre Peninsula in South Australia and began associated works to provide suitable manganese product under the agreement to PBT.

On 19 October 2022, ChemX appointed Alwyn Vorster as a Non-Executive Director. Mr Vorster has held various directorships over the past 12 years and was most recently Managing Director of ASX-listed BCI Minerals Ltd and currently Interim Managing Director of Hastings Technology Metals Ltd (ASX:HAS). He was also formerly Managing Director of Iron Ore Holdings Ltd and Non-Executive Director of Volt Resources Ltd and held management positions in several mining and resources companies, including Aquila Resources Pty Ltd (Head – Iron Ore and Manganese) and Rio Tinto Iron Ore (Regional Manager – China).

On 27 October 2022, the Board appointed co-founder and Executive Director Stephen Strubel to the role of Interim Managing Director, with former Managing Director David Leavy remaining with ChemX advising on marketing.

Financial

The Company received \$343,000 in research and development (**R&D**) rebates and completed the quarter with \$4,175,000 in cash. Investment was accelerated in HPA test work and manganese product development, in addition to marketing activities to meet product specifications and take advantage of opportunities created by the Inflation reduction Act (**IRA**) in the United States. Administration and corporate costs reflected one off expenses for investment in the new integrated HPA facility in Perth. The Company further increased expenditure on geological work streams as part of planning for its 2023 battery grade manganese exploration program.

ASX Compliance

In accordance with ASX Listing Rule 5.3.1, details of the Company's exploration activities for the quarter, including any material developments or material changes in those activities and a summary of the expenditure incurred on those activities is detailed in the preceding sections and in Table B below. There were no substantive exploration activities in the quarter.

With respect to Listing Rule 5.3.2, the Company confirms that there was no mine production or mine development activities for the quarter.

In accordance with Listing Rule 5.3.3 the Company provides the following information in relation to its mining tenements in Table A. No mining tenements were acquired or disposed of during the quarter. The Company is a party to a mineral rights agreement with Pirie Resources Pty Ltd to explore for, and if warranted, develop mining operations exclusively for graphite.

Table A – Tenements

Tenement	Registered Holder	Beneficial Interest	Location	Status
EL 6634	ChemX Materials Ltd	100%	South Australia	Live
EL 5920	ChemX Materials Ltd	100%	South Australia	Live

For the purposes of Listing rule 5.3.4, the Company provides that following comparison in Table B of actual expenditure during the quarter against the use of funds following the issue of securities pursuant to the Prospectus, together with an explanation of any material variances.

Table B – Comparison of actual expenditure versus estimated expenditure.

Use of Funds	Estimate for the first 2 years after ASX admission	Actual use December 2022 Quarter	Actual use Jan 22 to Dec 22	Balance Remaining 2022
Exploration at Eyre Peninsula Project	1,043,000	167,944	679,284	363,716
HPA Test Work	650,000	424,675	563,749	86,251
HPA Pilot Plant	2,500,000	0	162,935	2,337,065
Product Development	1,000,000	57,931	214,881	785,119
Expenses of the Offer	875,715	0	703,654	172,061*
Administration & Working Capital	2,431,285	185,725	1,724,639	706,646
Total	\$8,500,000	836,274	4,049,141	4,450,859

*Amount remaining relates to timing of payments made prior to the March quarter 2022 and after the release of the Prospectus.

In accordance with Listing Rule 5.3.5, the Company confirms payments totalling \$122,000 were made to directors for employment costs as well as to associates and related parties of the Company, for services rendered up to 31 December 2022.

Deferred Consideration Shares

In relation to the acquisition of HiPurA Pty Ltd which was completed on 31 December 2021:

1. The number of Deferred Consideration Shares pending issue (on issue) is 2,500,000.
2. The terms of and conditions for the issue of Deferred Consideration Shares are summarised below:
 - Commissioning of HPA Pilot Plant
3. During the quarter no Deferred Consideration shares were issued or cancelled.
4. There were no further milestones met during the quarter.

During the December 2022 Quarter the following ASX Announcements were made:

1. 22 December 2022 Notice of Release of Escrowed Securities
2. 16 December 2022 Battery Grade Manganese Exploration & Development Update
3. 2 December 2022 Notification regarding unquoted securities
4. 2 December 2022 Notification of cessation of securities
5. 22 November 2022 Change of Director's Interest Notice -APV
6. 22 November 2022 Change of Director's Interest Notice -WNH
7. 22 November 2022 Change of Director's Interest Notice -KPY
8. 18 November 2022 Notification regarding unquoted securities
9. 18 November 2022 Proposed issue of securities – CMX
10. 11 November 2022 AGM – Results
11. 11 November 2022 AGM – MD's Presentation
12. 11 November 2022 AGM – Chairs Address
13. 9 November 2022 Integrated HPA Facility in Perth Commissioned
14. 27 October 2022 Final Director Interests Notice
15. 27 October 2022 ChemX Board & Management Changes
16. 26 October 2022 Quarterly Activities Report
17. 26 October 2022 Appendix 5B Cash Flow Report
18. 21 October 2022 CMX Addendum to Notice of Annual General Meeting
19. 20 October 2022 ChemX- Southwest Connect ASX Showcase
20. 19 October 2022 ChemX Appoints Alwyn Vorster as Non-Executive Director
21. 10 October 2022 CMX-Notice of AGM and Proxy Form
22. 7 October 2022 ChemX Drill Results Confirm Significant Kaolin Prospect
23. 6 October 2022 Notification regarding unquoted securities
24. 3 October 2022 CMX Signs MOU with PBT & Appoints GM Battery Tech

This Announcement has been authorised for release by the Board.

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About ChemX Materials (ASX: CMX)

ChemX is a materials technology company focused on providing critical materials required for electrification and decarbonisation. The Company's vision is to support the energy transition with materials and technology that provide real solutions to lowering carbon emissions.

Developed in-house, ChemX's HiPurA® Process is a unique technology that 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 cost and low in energy consumption, compared to alternative technologies. A key competitive advantage is that the HiPurA® process is not tied to mine production, with the feedstock being a widely available chemical.

The Company has projects in South Australia and Western Australia. The South Australian Eyre Peninsula projects include the Kimba Kaolin-REE Project and the Jamieson Tank Manganese Project. The ChemX HiPurA® Project is located in Western Australia.

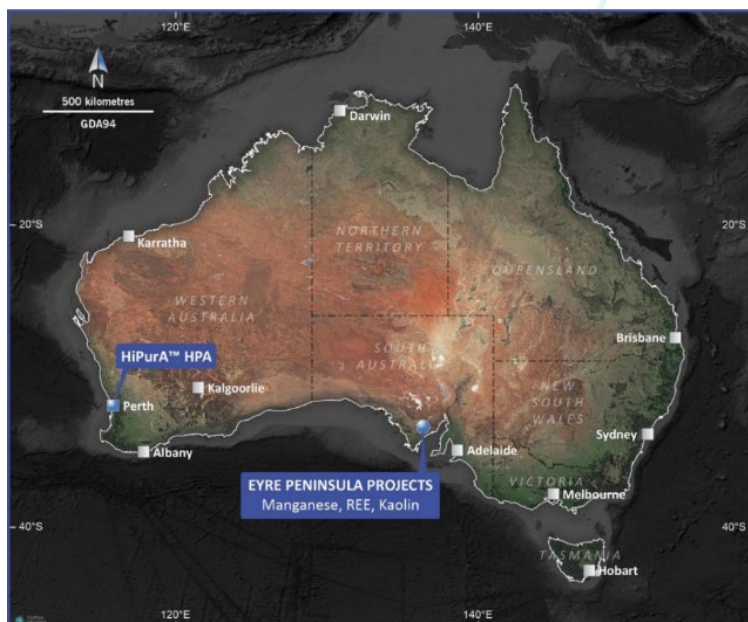


Figure 2 – ChemX Project Locations

www.chemxmaterials.com.au[LinkedIn](#)**Directors**Kristie Young **Non-Executive Chair**

Warrick Hazeldine

Non-Executive DirectorStephen Strubel **Interim Managing Director**

Alwyn Vorster

Non-Executive Director