ASX ANNOUNCEMENT

24 April 2023

ChemX Materials Ltd March 2023 Quarterly Activities Report

- **Manganese exploration campaign on Eyre Peninsula, South Australia completed targeting maiden JORC compliant Mineral Resource Estimate (MRE)**
- **ChemX appoints new Chief Executive Officer, Non-Executive Chairman and Non-Executive Director positioning Company for growth.**
- **Metallurgical testing continuing and flow sheet development to produce battery grade manganese sulphate.**
- **MoU signed with lithium-ion battery leader C4V to enter qualification for battery grade manganese.**
- **High Purity Alumina (HPA) advanced with Pilot Plant detail design commenced.**

ChemX Materials (**ASX:CMX)** (**ChemX** or **the Company**), an Australian based high purity critical materials business, is pleased to present its March 2023 quarterly report.

The Company is developing High Purity Manganese (HPM) on the Eyre Peninsula in South Australia along with its High Purity Alumina (HPA) Project in Perth, Western Australia.

ChemX CEO Mark Tory commented: "The Company has undergone significant change and progress during the March quarter with the business positioned for growth. The completion of the 2023 Manganese exploration drilling campaign will likely lead to establishment of the Company's maiden Mineral Resource. Laboratory scale test-work is continuing on the flowsheet for HPM, with the aim to build a pilot plant to test the flowsheet in 2024. Optimisation work is also continuing on the HPA micro-plant in O'Connor, Western Australia and work has commenced on detailed design for the HPA Pilot Plant.

The establishment of the MoU with Lithium-Ion Battery Leader C4V demonstrates the global potential of our projects and market interest to begin the important qualification process in the battery industry. The Company is progressing discussions with a range of parties to pursue qualification for its high purity materials for inclusion in the global battery supply chain."

Manganese Exploration

During the quarter the Company completed a drilling campaign of 6,164m reverse circulation drilling (RC). This campaign was designed to infill the drill spacing over the northern-most 2km strike of the Jamieson Tank deposit for the purpose of estimating a maiden JORC compliant Mineral Resource. ChemX initiated the accelerated development program of the Manganese assets in response to changing market dynamics generated by the United States Inflation Reduction Act (IRA) and changing lithium-ion battery chemistries which are requiring increasing amounts of manganese in order to develop enhanced energy density, improve battery stability, faster charge times and lower costs.

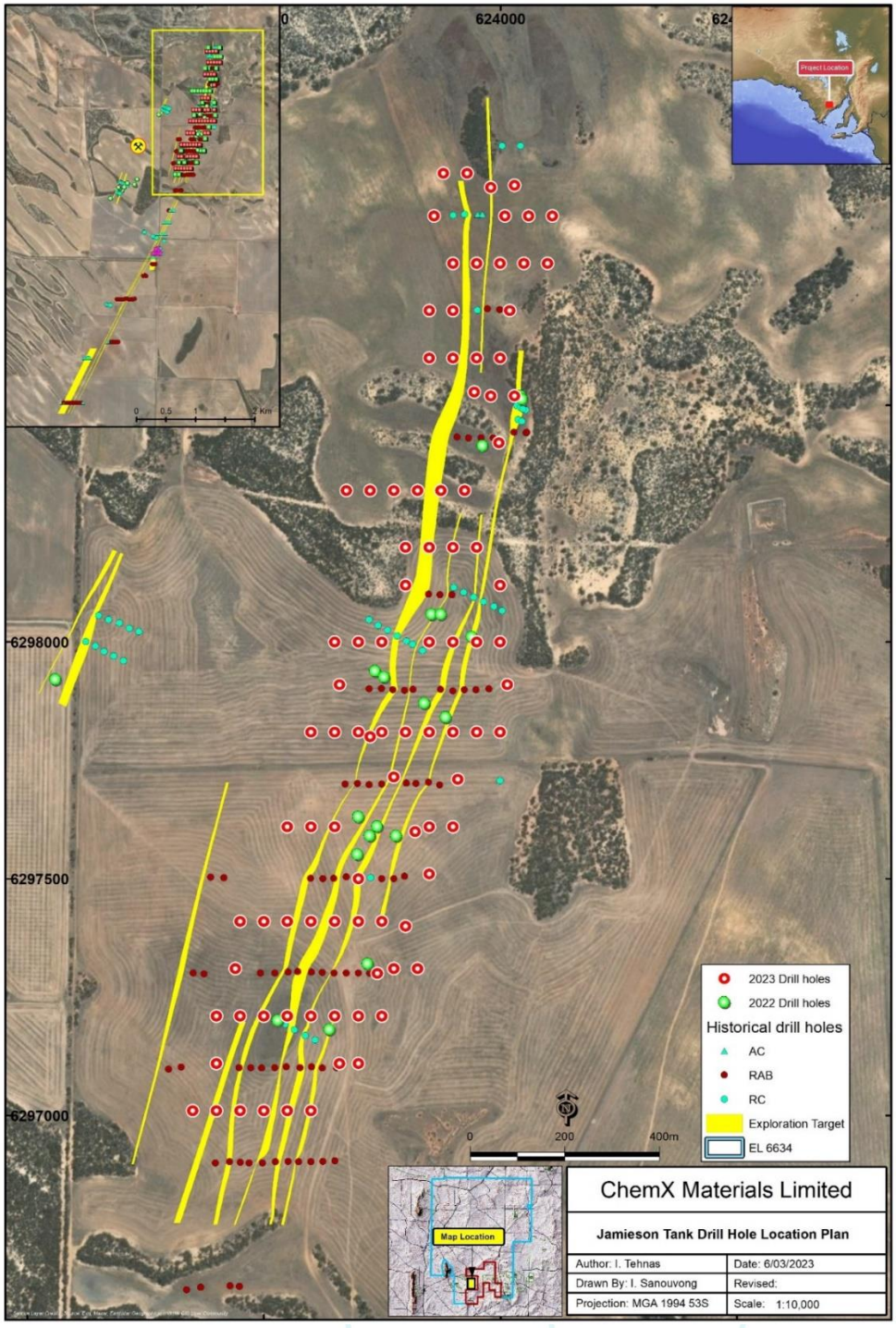

Figure 1: Jamieson Tank drill hole and Exploration Target location plan

Downhole geophysics was employed to derive an in-situ density and support the Mineral Resource estimation. In addition, multiple geophysical techniques were used to complement the geological interpretation of Jamieson Tank and improve the geological continuity which was identified as a risk in the Exploration Target.

The manganese mineralisation is predominantly cryptomelane, hosted in jaspilite, and positioned near surface under a thin horizon of Quaternary clays and sands.

In addition to the Jamieson Tank project, ChemX has identified further manganese prospects at Bunora West, Hodgins, Windyzell, Francis and Polinga. These prospects have not been adequately explored and offer future discovery potential and feed options for the proposed future High Purity Manganese Sulphate Production plant. (ASX 27 July 2022)

The first round of assay results was reported to ASX following completion of the quarter on 17 April 2023. Further results are expected over the next several weeks.

The Company continues to advance its beneficiation test work on further representative samples of manganese ore from Jamieson Tank, in addition to development of the high purity manganese flow sheet. The work remains in progress with completion subject to external laboratory schedules.

Board and Management Strengthened with Key Appointments

Following an extensive search process, ChemX appointed Mr Mark Tory as Chief Executive Officer as the Company seeks to accelerate the development of its key HPM and HPA Projects. Mr Tory, an experienced mining and finance executive with more than 35 years' experience in the mining industry and accounting profession served as both Chief Executive Officer and Chief Financial Officer at Northern Minerals Ltd which was focused on the development of its Rare Earth Project in the Kimberley region of Western Australia. Mr Tory has also been involved in multiple exploration programs and project studies at Northern Minerals, Crescent Gold, Anglo American and Homestake.

In addition, following the resignation of Ms Kristie Young, Mr Warrick Hazeldine was appointed as Chairman and Ms Tara Berrie as Non-Executive Director. Mr Hazeldine is an experienced director and currently serves as Non-Executive Chairman at Global Lithium Ltd. Mr Hazeldine was the co-founder of Cannings Purple, a leading Investor and Public Relations firm. Ms Berrie is currently Senior Group Manager (Battery Metals) at Rivian Automotive, Inc and was previously Global Supply Manager, Battery Metals at leading electric vehicle manufacturer Tesla. Mr Stephen Strubel who served as interim Managing Director reverted to his previous role as Executive Director and was subsequently appointed as Company Secretary prior to the conclusion of the quarter.

MoU Signed with Lithium-ion Battery Leader C4V

ChemX signed a Memorandum of Understanding (MoU) with Lithium-ion Battery leader C4V to enter qualification for the Company's High Purity Manganese (HPM) project and collaboratively work towards an offtake agreement.

C4V is a global leader in lithium-ion battery technology and is involved in some of the world's largest gigafactory developments, including in Australia. While HPM is the focus of the agreement the MoU allows for the companies to work together on further battery materials including ChemX's HPA project.

Entering qualification with battery technology developers such as C4V is an important first step in ensuring battery materials suppliers are able to produce high purity materials that meet the specific requirement of evolving battery chemistries.

Throughout the quarter ChemX has increased its marketing activity and engagement with Original Equipment Manufacturers (OEM) and battery chemistry companies across its HPM and HPA projects, seeking to enter product qualification and is in early-stage discussions with several parties. ChemX's HPM and HPA projects offer a compelling value proposition for entities operating in the lithium-ion battery sector, who are seeking supply diversification, high purity credentials and a tier one sovereign jurisdiction such as Australia.

High Purity Alumina (HPA)

To reduce the risk associated with HPA Pilot Plant scale up ChemX constructed a Micro Plant, which was commissioned to optimize the process under continuous operation, achieve 4N production quality and create samples for qualification with potential customers. The ChemX HPA Process was the subject of the Prefeasibility Study (PFS) completed by Primero Group in mid-2022 which confirmed mass and energy balances, pilot plant capital expenditure and confirmed the hydrometallurgical flow sheet.

Following initial commissioning ChemX worked with its external laboratory to reduce turnaround times and improve assay detection limits on samples dispatched at various stages of the process to calibrate final purification steps.

Achieving 4N HPA product involves sample quality with impurities of less than 100 parts per million. 5N HPA requires impurities of less than 10 parts per million. Assay results for a number of impurities are now recorded at levels below detection limits. To verify final assay values ChemX is working with its primary external laboratory to lower detection limits in order to confirm element values before sending to potential customers for testing.

Figure 2. ChemX HPA Micro Plant

In the present high demand environment for laboratory services, ChemX has commissioned an internal laboratory with dedicated high purity analysis equipment to increase speed of process optimization iteration. This has improved detection limits to parts per billion (ppb) for impurities in liquid phase prior to precipitation and reduced turnaround times from weeks to hours, before dispatching material to external laboratories for third party validation. This investment will greatly increase the speed at which ChemX can optimize the HPA process and target higher levels of purification (5N HPA) for increased value.

Optimisation of the Micro Plant has created significant data for the detailed design phase of the HPA Pilot Plant which is currently underway with key equipment, process and automation control equipment submitted for quotation with suppliers. The Company has made significant investment in its integrated High Purity Alumina facility in Perth, Western Australia which were part of the original capital cost estimates included in the pilot plant construction. Following commissioning and operation of the pilot plant ChemX will be able to initiate commercial feasibility work on a full-scale HPA production facility.

Figure 3 - ChemX employee in Laboratory.

Figure 4 - ChemX HPA Sample.

The ChemX HPA process uses a widely available chemical feedstock, is scalable, modular, independent of mine production, and able to produce different product specifications to suit individual customer requirements and further aluminous based products such as high purity aluminium cathode precursor salts for lithium-ion batteries.

Due to changing circumstances in the global battery materials market ChemX has been actively engaging with potential customers for HPA seeking to enter qualification for HPA and the aluminous chemicals that the ChemX flow sheet is capable of producing.

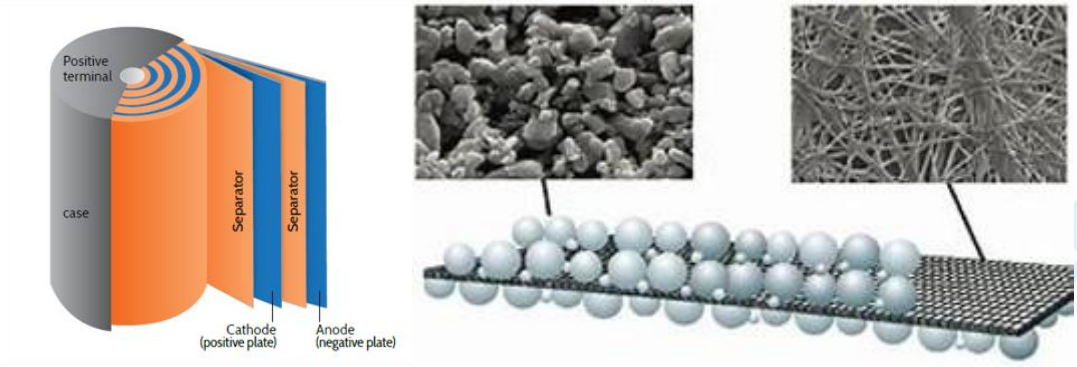

Figure 5 - HPA Coating in Lithium-Ion Battery Separators.

The ChemX Materials HPA Process is a significant development in the HPA market with a vastly simplified flow sheet allowing for operation to start at small scales of circa 2,000tpa and scale up with demand growth, providing lower capital costs, less energy and reagents usage then the US Bureau of Mines (USBM) Kaolin to HPA Process. Smaller scale plant operation would allow for co-location of production facilities within gigafactories or separator manufacturers. The HPA market is highly specialised with requirements for varying particle sizes and morphology which smaller scale operations can effectively target allowing for ChemX to gain a foothold in the market and establish credentials before scaling up operations.

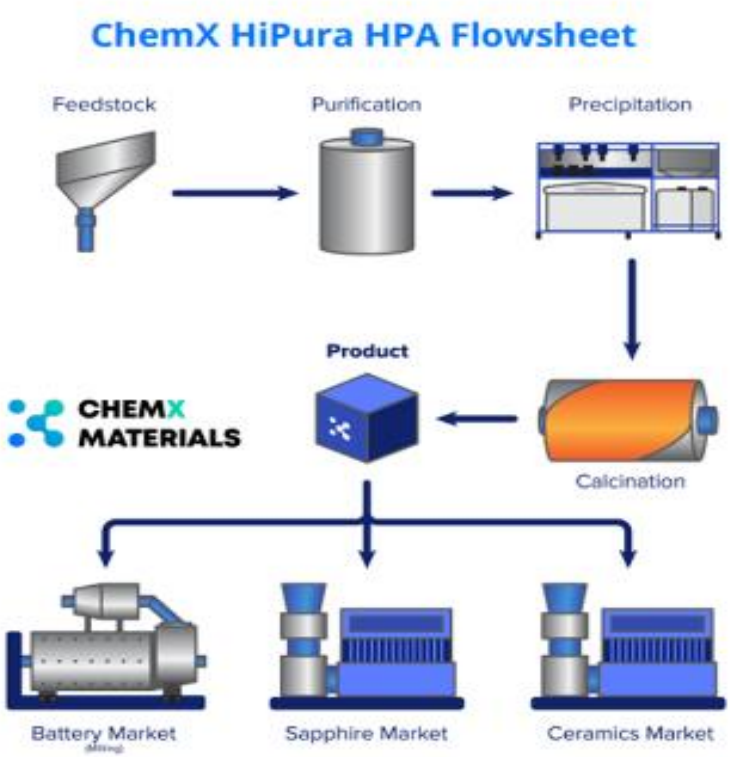

Figure 6. HPA Flowsheet.

Kaolin and Rare Earth Elements

The Company has reviewed its Kaolin and Rare Earth Elements Projects and will deprioritise these assets in favour or pursing its high purity battery materials strategy given current global battery demand opportunities. The Company is open to divesting, or joint venturing these projects in a way that creates shareholder value.

Financial

The Company completed the quarter with circa $2.1m in cash. Investment was accelerated in HPA test work and manganese exploration and product development, in addition to marketing activities to meet product specifications of battery industry participants.

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.

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. Material variances relate to further exploration and HPA testwork and larger staff profile.

Table B – Comparison of actual expenditure versus estimated expenditure.

Use of Funds	Estimate for the first 2 years after ASX admission	Actual use Mach 2023 Quarter	Actual use Jan 2023 to Mar 2023	Balance Remaining
Exploration at Eyre Peninsula Project	1,043,000	982,653	1,661,937	(618,937)
HPA Test Work	650,000	353,569	917,318	(267,318)
HPA Pilot Plant	2,500,000	0	162,935	2,337,065
Product Development	1,000,000	89,005	303,886	696,114
Expenses of the Offer	875,715	0	703,654	172,061*

Administration & Working Capital	2,431,285	686,462	2,411,101	20,184
Total	$8,500,000	2,111,689	6,160,831	2,339,169

*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 $167,000 were made to directors for employment costs as well as to associates and related parties of the Company, for services rendered up to 3 March 2023.

Differences between estimated expenditure and actual expenditure primarily relate to increased expenditure on manganese exploration designed to estimate a maiden mineral resource in based on previous exploration success and new exploration target (27 July 2022) and investment in the High Purity Alumina project.

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.

Confirmations

27 July 2022 Jamieson Tank Manganese & HPMSM Project Update

17 April 2023 Significant Manganese Assays

The Company confirms that it is not aware of any new information or data that materially affects the information included in the above market announcements.

During the March 2023 Quarter the following ASX Announcements were made:

1. 30 March 2023 ChemX signs MoU with lithium-ion battery leader
2. 24 March 2023 Change of Company Secretary
3. 8 March 2023 Half yearly Report and Accounts
4. 8 March 2023 Manganese Drilling Campaign Completed
5. 10 February 2023 Notification regarding unquoted securities
6. 10 February 2023 Initial Director's Interest Notice
7. 10 February 2023 ChemX Appoints Tara Berrie as Non-Executive Director

8.	6 February 2023	Final Directors Interest Notice
9.	6 February 2023	Notification of cessation of Securities – CMX
10.	6 February 2023	Board and Management Changes
11.	30 January 2023	Quarterly Activities Report
12.	30 January 2023	Appendix 5B Cash Flow Report
13.	16 January 2023	Battery Grade Manganese Exploration Commences
14.	4 January 2023	Change in Substantial Holding - CMX
15.	4 January 2023	Application for quotation of securities

This Announcement has been authorised for release by the Board.

For enquiries:

Mark Tory
Chief Executive Officer
ChemX Materials Ltd
mark@chemxmaterials.com.au
+61 (0) 488 188 638

Stephen Strubel
Executive Director and Company Secretary
ChemX Materials Ltd
stephen@chemxmaterials.com.au
+61 (0) 404 400 785

About ChemX Materials (ASX: CMX)

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 test work 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.

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 test work has indicated that the process is low cost and low in energy consumption, compared to alternative methods. A key competitive advantage is that the HiPurA® process modular, scalable and is not tied to mine production, with the feedstock being a widely available chemical.

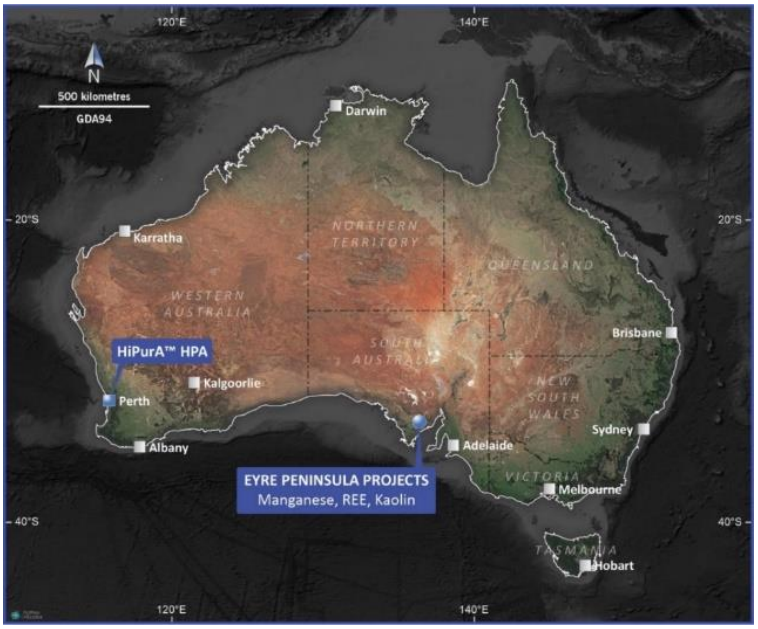

***Figure 2** – ChemX Project Locations*

www.chemxmaterials.com.au LinkedIn