

# **June 2024 Quarterly Activities Report**

The following is a summary of the activities conducted by VRX Silica Limited (**VRX** or **Company**) during the June 2024 quarter at its silica sand projects at Arrowsmith (located 270 km north of Perth), Muchea (located 50 km from Perth) and Boyatup (located 100 km east of Esperance), all situated in Western Australia.

#### **VRX Silica Sand Resources**

VRX is a Western Australian based pure-play silica sand exploration and development company with five high-value, advanced, very long-term silica sand projects in Western Australia, a Tier 1 mining region.

The Company has multi-decade scale contiguous sand deposits on granted Mining Leases with secure tenure and a combined 1.4Bn tonne Mineral Resource of 99.6% to 99.9% SiO<sub>2</sub> grade silica sand.<sup>1</sup>

The Company and its management team is based in Western Australia, as are its five large scale, high-grade and low impurity silica sand projects. Each project can be run independently and supply high-grade silica sand to many diverse markets.



Figure 1: VRX Projects Locations

<sup>&</sup>lt;sup>1</sup> See Resources and Reserves Table



# **Applications of Silica Sand**

Silica sand is the most-used commodity on the planet after air and water. It is the main ingredient in all types of **glassmaking**, including specialty solar panel and high-tech glass. The glass manufacturing industry demand is increasing at a rate of 5-6% per year, or about 8-10 million tonnes pa. Around 47% of the world's glass is manufactured in Asia.

Silica sand is an essential component of the **foundry** and casting industries. The largest foundry industry is in Korea where it dominates the industry particularly for large marine components. Arrowsmith North can produce three grades of sought after foundry sand. Large samples have been sent to Korean and Japanese foundry companies and foundry sand suppliers who have confirmed that the samples meet their rigorous requirements.

Significant R&D in recent years has had a profound impact on the foundry and casting industry. Particularly in the development of 3D printing and 3D printing media suitable for production of molds.

Recent developments in 3D printing highlight significant advancements in technology, materials, and applications, demonstrating the industry's rapid growth and increasing impact across various sectors including the foundry and casting industries. Innovations in 3D printing technology, particularly for producing casting media, are enhancing the efficiency and precision of manufacturing processes, thereby boosting the demand for high-quality silica sand suitable for 3D printing media.

VRX can produce high-quality, in-demand silica sand products for the foundry and casting industries from its Arrowsmith North silica sand project, 270 kilometres north of Perth Western Australia.

Silica sand is also the main ingredient in concrete and is the largest user of available supplies and a primary reason for depleted resources in Asia including silica sand reserves that may be beneficiated to glassmaking and foundry quality.

Silica sand is a <u>finite</u> resource that is rapidly being exhausted and the Asia-Pacific region is currently experiencing **increasing demand** at a time of a **global supply shortfall**.

# **Environmental Approvals Process – Arrowsmith North**

VRX's application for environmental approval at Arrowsmith North (**Proposal**) is at the Response to Submissions (**RtS**) stage. The RtS is the Company's response to public submissions on the Environmental Review Document (**ERD**) for the Proposal.

On 11 April 2024, the Company received formal comments on the RtS from the State Environmental Protection Authority (**EPA**) and Commonwealth Department of Climate Change, Energy, the Environment and Water (**DCCEEW**). The Company subsequently updated the RtS document in response to those comments and on 30 May 2024 announced that the EPA has acknowledged receipt of that response.

The RtS is a vital component of the EPA assessment process and, when published, is an acceptance by the EPA that the information supplied by the Company is adequate for the EPA to complete its assessment.

This work is the culmination of an extensive series of studies that have been undertaken for the Proposal, which are included in the Environmental Review Document that has previously been published on the EPA website.

The Company is in discussions with the EPA to finalise the updated RtS. Subject to acceptance of the RtS by the EPA, the EPA will publish the RtS on its website, following which the EPA will prepare an assessment report on the Proposal for approval by the Western Australian Environment Minister with recommended conditions.



# **High Grade Silica Flour Testwork**

In the previous quarter the Company announced that it had sent a 1,000kg sample of selected Muchea silica sand to a specialist testwork laboratory in Germany, to undertake comminution testing to determine the yield and quality of silica flour that can be produced from the raw material selected from the Muchea Silica Sand Project. This testwork follows the grant to VRX of \$2 million in matched funding under the Investment Attraction Fund (IAF), part of the State Government's Diversify WA initiative, a collaboration between government, industry and the community supporting the WA Government's focus on creating secure, quality jobs, growing and diversifying the economy and attracting new investment.

During the quarter the Company has received an additional \$150,000 under the terms of the grant.

The testwork program followed a typical flow sheet of ball mill grinding followed by air classification and sizing to produce the specific particle size required by LCD glass manufacturers. The target specification, provided by VRX, conforms to the requirements of major producers of LCDs in Asia.

These research and development activities, which start with the production of silica flour, will ultimately result in high value downstream processing opportunities that will maximise the value of VRX's world-class high-quality Muchea Silica Sand Project (**Muchea**).

On 22 April 2024 VRX announced the assay results for the high-grade silica flour produced from its Muchea project.

All testing materials and products have been returned to VRX for elemental testing, and the results of that testwork confirm they match those of the product specification supplied by VRX and requested by end users. Table 1 (below) sets out these results.

	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	TiO₂%	LOI %
Silica Flour	99.9	0.09	0.01	0.01	0.03

Table 1: Assay Results

The Company has received a number of enquiries for silica flour products and samples have been dispatched to a select number of potential customers in Asia.

The Company will collate the response to samples provided by potential buyers which will determine the next step in the program.

#### **VDT Trials**

In the previous quarter VRX applied to undertake trials of its vegetation direct transfer (**VDT**) mining method and this was approved by the Department of Energy, Mines, Industry Regulation and Safety and Commonwealth (**DEMIRS**) and State environmental authorities for Arrowsmith North and Muchea.

Unfortunately a bush fire has passed over the designated area at Muchea and an alternative area is to be selected with a PoW to be lodged at DEMIRS.

While the selected area will require a new Native Vegetation Clearing Permit, the burnt area will not require further surveys if the operations (including exploration drilling) are conducted in the next two years. The Company has established photo control points to monitor the recovery of the different vegetation types in the burnt areas.



## **Corporate**

#### **Capital Raising**

On 2 May 2024 the Company announced a fully underwritten renounceable pro-rata entitlement issue to eligible shareholders of one new fully paid ordinary share for every 13 shares held on the record date, at an offer price of \$0.055 per New Share, together with one free attaching option (exercisable at \$0.18 each and expiring on 31 August 2025) for every two new shares subscribed for and issued, to raise approximately \$2.46 million (before expenses).

On 27 May 2024 the Company announced it had received valid applications for 11,224,203 new shares and 5,612,157 free-attaching options, raising \$617,332. The remaining 33,652,917 shares and 16,826,468 options (approx. \$1.85 million) not taken up under the offer was issued to sub-underwriters, and an additional 22,437,637 options were issued to sub-underwriters pursuant to the underwriting arrangements.

The new shares and new options were allotted and issued on 29 May 2024.

The proceeds of the offer will be applied to the Company's Muchea project, Arrowsmith North project, VDT trials and environmental follow-up, working capital and expenses of the offer.

Canaccord Genuity (Australia) Limited (AFSL 234666) acted as lead manager and underwriter to the offer.

This offer replaced an earlier renounceable pro-rata entitlement, first announced on 10 April 2024 and withdrawn on 2 May 2024.

#### Reduction in corporate overheads and costs management

On 3 June 2024, the Company announced the completion of a top-down review of corporate overheads and expenditure and the introduction of cost saving initiatives across the business, with director fees and salaries reduced by 50% and significant cost control measures implemented on non-critical exploration activities and project development costs, personnel and corporate administration.

VRX noted that the Board is cognisant of the need to preserve capital as the regulatory approvals process continues beyond originally expected timeframes and the cost control measures form part of a prudent capital management program for the Company.

# **ASX Listing Rule 5.3 Disclosures**

#### Details of mining exploration activities:

Payments for exploration & evaluation under operating activities of \$36,000 related mainly to tenement rents.

Payments for exploration & evaluation under investing activities of \$114,000 consists mainly of environmental surveys and approvals costs.

There were no substantive mining production and development activities during the quarter.

#### Details of tenement activities:

During the quarter, the following Exploration Licences were surrendered or expired:

E69/3668, E70/4986, E70/5109, E70/5197.

#### Details of related party payments:

The aggregate amount of payments to related parties and their associates of \$125,000 represents directors' fees and salaries paid during the quarter.



## **Combined 1.4Bn tonne Mineral Resource**

Table 1 Mineral Resource Statement (as at 30 June 2024)

Project	Classification	Mt	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	TiO <sub>2</sub>	LOI %
	Indicated	29	99.6	0.1	0.03	0.1	0.2
Muchea	Inferred	179	99.6	0.1	0.02	0.1	0.2
	Total	208	99.6	0.1	0.02	0.1	0.2
	Measured	10	95.9	1.9	0.7	0.3	0.7
Arrowsmith	Indicated	237	97.7	1.0	0.4	0.2	0.5
North	Inferred	266	98.4	0.7	0.3	0.2	0.4
	Total	513	98.0	0.9	0.3	0.2	0.4
Arrowsmith	Inferred	523	97.3	1.4	0.4	0.2	0.6
Brand	Total	523	97.3	1.4	0.4	0.2	0.6
	Indicated	28.2	96.6	1.7	0.4	0.2	0.7
Arrowsmith	Inferred	48.3	96.9	1.5	0.4	0.2	0.7
Central	Total	76.5	96.8	1.5	0.4	0.2	0.7
Povatup	Inferred	60	97.8	0.8	0.2	0.1	0.9
Boyatup	Total	60	97.8	0.8	0.2	0.1	0.9

**Total Mineral Resource** 

**Million Tonnes** 

Table 2 Ore Reserve Statement (as at 30 June 2024)

Project	Classification	Product	Mt	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	LOI %
		F80	10.2	99.9	0.02	0.008	0.03	0.1
Muchea	Probable	F80C	4.25	33.3	0.02	0.000	0.03	0.1
		F150	4.25	99.8	0.07	0.015	0.035	0.1
Mu	chea Ore Rese	rve	18.7	Millior	<b>Tonne</b>	s		
		AFS20	0.8	99.5	0.25	0.07	0.05	0.1
	Proved	AFS35	3.9	99.5	0.5	0.06	0.05	0.1
	Proved	AFS55	2.7	99.2	0.5	0.1	0.05	0.1
		Local	1.8					
Arrowsmith	Proved Ore	9.2	Million Tonnes					
North	Probable	AFS20	24.2	99.5	0.25	0.07	0.05	0.1
		AFS35	102.5	99.5	0.5	0.06	0.05	0.1
		AFS55	51.1	99.2	0.5	0.1	0.05	0.1
		Local	34.1					
	Probable Or	e Reserve	212	Millior	Million Tonnes			
Arrowsr	mith North Ore	Reserve	221	Millior	<b>Tonne</b>	s		
		CF400	4.2					
Arrowsmith	Droboble	C20	8.4	99.6	0.25	0.04	0.03	0.1
Central	Probable	C40	4.2					
		High TiO <sub>2</sub>	2.2			<1%	2%	
Arrowsm	ith Central Ore	Reserve	18.9	Millior	Tonne	s		

**Total Ore Reserve** 259 **Million Tonnes** 



# **Compliance Statement**

The information in this document that relates to the estimation and reporting of the Mineral Resource and Ore Reserves for the Company's silica sands projects is extracted from releases to ASX on 28 August 2019 and 11 November 2022 (Arrowsmith North), 17 September 2019 (Arrowsmith Central), 9 May 2023 (Arrowsmith Brand), 18 October 2019 (Muchea) and Boyatup (18 August 2022). The Company confirms that it is not aware of any new information or data that materially affects the information included in this document and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

The information in this announcement that relates to the previous exploration results have been cross referenced to the original announcement. The Company is not aware of any new information or data that materially affects the previous exploration results.

The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified.

This quarterly activities report has been approved for release by the Managing Director.



# **Interests in Mining Tenements (Western Australia)**

Arrowsmith Project - Silica Sand

Tenement	Status	Interest at beginning of quarter	Interests relinquished, reduced or lapsed	Interests acquired or increased	Interest at end of quarter
E70/4986	Surrendered	100%	100%	-	-
E70/4987	Granted	100%	-	-	100%
E70/5027	Granted	100%	-	-	100%
E70/5109	Expired	100%	100%	-	-
E70/5197	Surrendered	100%	100%	-	-
E70/5817	Granted	100%	-	-	100%
M70/1389	Granted	100%	-	-	100%
M70/1392	Granted	100%	-	-	100%
M70/1418	Granted	100%	-	-	100%
L70/198	Granted	100%	-	-	100%
L70/199	Granted	100%	-	-	100%
L70/202	Granted	100%	-	-	100%
L70/203	Granted	100%	-	•	100%
L70/208	Granted	100%	-	•	100%
L70/229	Application	1	-	-	-
L70/230	Granted	100%	-	-	100%
G70/264	Granted	100%	-	-	100%
G70/265	Granted	100%	-	-	100%

# Muchea Project - Silica Sand

Tenement	Status	Interest at beginning of quarter	Interests relinquished, reduced or lapsed	Interests acquired or increased	Interest at end of quarter
E70/4886	Granted	100%	•	-	100%
E70/5157	Granted	100%	-	-	100%
E70/5548	Granted	100%	1	-	100%
E70/5651	Application	1	1	-	-
M70/1390	Granted	100%	1	-	100%
M70/1414	Application	1	-	-	-
L70/200	Granted	100%	-	-	100%
L70/204	Granted	100%	-	-	100%
L70/205	Application	-	-	-	-
L70/206	Granted	100%	-	-	100%

## Boyatup Project - Silica Sand

Tenement	Status	Interest at beginning of quarter	Interests relinquished, reduced or lapsed	Interests acquired or increased	Interest at end of quarter
E69/3560	Granted	100%	-	-	100%
E69/3668	Surrendered	100%	100%	-	-

## Dandaragan Project

Tenement	Status	Interest at beginning of quarter	Interests relinquished, reduced or lapsed	Interests acquired or increased	Interest at end of quarter
E70/6501	Granted	100%	-	-	100%
E70/6502	Granted	100%	-	-	100%
E70/6503	Application	-	-	-	-
E70/6504	Granted	100%	-	-	100%
E70/6505	Application	-	-	-	-



#### **About VRX Silica Limited**

**VRX Silica Limited (ASX: VRX)** is the most advanced pureplay silica sand company listed on the ASX, developing its 100% owned silica sand projects at Arrowsmith (North, Brand and Central), Muchea and Boyatup in Western Australia.

Silica sand is the most used commodity on the planet after air and water. It is the main ingredient in all types of glassmaking, including specialty solar panel and high-tech glass, and foundry casting. It is a finite resource that is running out, with the Asia-Pacific region experiencing an ever-growing supply shortfall that is driving up prices.

Arrowsmith is located 270km north of Perth. Arrowsmith North boasts a minimum 25-year mine life capable of producing more than 2Mt tonnes per year of high-grade (99.7% SiO<sub>2</sub>)\* silica sand for export to the foundry, container glass and flat glass markets in Asia, with permitting well advanced, and will lead production.

Muchea, located 50km north of Perth, is an ultra-high-grade (99.9% SiO<sub>2</sub>)\* silica sand project capable of producing sand required for ultraclear glass for solar panels and other high-tech glass applications.



Boyatup, located 100km east of Esperance, is under development and capable of producing sand for the glass market.

<sup>\*</sup>Information relating to grades are extracted from releases to ASX on 28 August 2019 and 11 November 2022 (Arrowsmith North) and 18 October 2019 (Muchea). The company is not aware of any new information or data that materially affects this information.

# **Appendix 5B**

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

VRX SILICA LTD			
ABN	Quarter ended ("current quarter")		
59 142 014 873	30 June 2024		

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(36)	(300)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(353)	(1,459)
	(e) administration and corporate costs	(515)	(1,807)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	4	27
1.5	Interest and other costs of finance paid (on lease liability)	(5)	(25)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	150	881
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(755)	(2,683)

2.	Ca	sh flows from investing activities		
2.1	Pay	yments to acquire or for:		
	(a)	entities	-	-
	(b)	tenements	-	-
	(c)	property, plant and equipment	(180)	(271)
	(d)	exploration & evaluation	(114)	(1,017)
	(e)	investments	-	-
	(f)	other non-current assets	-	-

ASX Listing Rules Appendix 5B (17/07/20)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (bonds deposit)	-	-
2.6	Net cash from / (used in) investing activities	(294)	(1,288)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	2,468	5,218
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(295)	(435)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (repayment of lease liability)	(21)	(81)
3.10	Net cash from / (used in) financing activities	2,152	4,702

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,210	1,582
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(755)	(2,683)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(294)	(1,288)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,152	4,702

ASX Listing Rules Appendix 5B (17/07/20)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	2,313	2,313

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	2,313	1,210
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	2,313	1,210

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	125
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
Moto: i	f any amounts are shown in items 6.1 or 6.2. your quarterly activity report must include	do a description of and an

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7.	Financing facilities  Note: the term "facility" includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	.3 Other (please specify) -		-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	uarter end	-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	Estim	ated cash available for future operating activities	\$A'000
8.1	Net ca	sh from / (used in) operating activities (item 1.9)	(755)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))		(114)
8.3	Total re	elevant outgoings (item 8.1 + item 8.2)	(869)
8.4	Cash a	and cash equivalents at quarter end (item 4.6)	2,313
8.5	Unuse	d finance facilities available at quarter end (item 7.5)	-
8.6	Total a	vailable funding (item 8.4 + item 8.5)	2,313
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)		2.66
Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, and Otherwise, a figure for the estimated quarters of funding available must be included in item 8.			
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:		
	8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?		
	Answe	r: Not applicable	
	8.8.2	Has the entity taken any steps, or does it propose to take an cash to fund its operations and, if so, what are those steps a believe that they will be successful?	
	Answe	r: Not applicable	

8.8.3	Does the entity expect to be able to continue its operations and to meet its business
	objectives and, if so, on what basis?

Answer: Not applicable

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date:	30 July 2024
Authorised by:	The Board
Additions Cd by.	(Name of body or officer authorising release – see note 4)

#### Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.