
Report for December Quarter, 2018

30 January, 2019

ASX Code: PUA, PUAOC

Highly successful quarter puts Pure Alumina on track for production of high purity alumina this year

Proposed acquisition of leading Canadian producer would see Pure Alumina produce top quality HPA in 2019 with very low capital costs

Highlights

- **Pure Alumina has signed a non-binding term sheet to negotiate terms for the possible acquisition of unlisted Canadian company Polar Sapphire (www.polarsapphire.com)**
- **Polar's patented high purity alumina (HPA) process produces exceptionally high quality 99.999% (5N) high purity alumina (HPA) in Toronto**
- **Polar has established HPA sales with sapphire producers and is developing relationships in the battery separator sector**
- **Polar's process has extremely low capital costs of ~A\$12m per 1,000tpa HPA and its modular design enables rapid expansion**
- **HPA demand is growing rapidly due to its use in LED lighting and demand is set to escalate from 2019 as lithium batteries for electric vehicles roll out.**
- **After completion of the acquisition, the strategy would be to build a 1,000 tpa HPA plant in 2019 then expand to 5,000 tpa HPA production within 3 years to capture projected HPA growth. Integration of Pure**



Alumina's kaolin process would be developed to reduce production costs

- **Sale of Pure Alumina's Hill End gold project has been extended to allow bidders more time to finalise their finance**
- **R&D tax incentive of \$488,000 received in January 2019 to maintain acceptable cash position**

Corporate

On 1 November 2018, following a successful shareholder vote, the Company's name changed to Pure Alumina Limited. This aligned the Company name with its stated strategy of becoming a leading producer of high purity alumina.

Pure Alumina signed a non-binding term sheet which contemplates exclusive negotiation of terms for the acquisition of 100% of Toronto-based high purity alumina (HPA) producer Polar Sapphire. Both parties have committed to work towards agreeing formal terms of a potential transaction on or before 31 January 2019. There is no certainty that formal terms for the proposed acquisition will be agreed or a transaction completed. Any formal terms will be subject to a range of conditions including (without limitation) confirmatory due diligence and receipt of necessary shareholder, third party and regulatory approvals.

Since signing the non-binding term sheet, development of a binding acquisition agreement has proceeded to an advanced stage. Due diligence by both Polar and Pure Alumina is underway.

Polar is currently producing HPA at its pilot plant in Toronto, generating cashflow in the process.

Polar's patented HPA process produces 99.999% (5N) HPA which is the highest purity commercial grade HPA available. The 5N HPA market generates attractive premiums over 4N and lesser purity HPA segments. The demand for 5N HPA is growing rapidly due to requirements to produce higher output LED lights and other high precision optical products. It is a relatively exclusive market because only a few companies globally have achieved commercial production achieving the specifications for 5N HPA.

Polar has already passed stringent qualification processes for its HPA with multiple synthetic sapphire producers receiving positive feedback that Polar HPA produces synthetic sapphire with fewer flaws in the crystal lattice and more transparent sapphire. This enables sapphire producers to generate higher yields of payable sapphire per kg of HPA and target premium white LED lighting segments. Sales orders from sapphire producers now exceed the capacity of Polar's pilot plant and therefore it is seeking to expand production.



Polar's production process has low capital. The estimated cost of constructing a 1,000 tpa HPA plant is circa A\$12 million. The entry cost of constructing the first 1,000 tpa of HPA production is approximately 3 per cent of Pure Alumina's 8,000 tpa Yendon HPA project and one quarter of the overall cost to build a plant with equivalent HPA output.

Polar's production can be rapidly expanded to meet forecast growth in HPA demand. The modular nature of Polar's process requires approximately only 6 months to build each 1,000tpa of output.

During January 2019, Pure Alumina received an R&D tax incentive payment of approximately \$488,000 in connection with the tax year ended 30 June 2018 to maintain an acceptable cash position.

Yendon High Purity Alumina Project

The HPA Project tenements, Exploration Licences 5457, 5461, 006447 and 006428, are located at Pittong and Yendon near Ballarat, Victoria, where kaolin mining and processing has occurred for decades. The Yendon kaolin resource is located on EL5457 and EL5461. Application for a retention licence over the Yendon kaolin deposit has been made to the Victorian Mines Department.

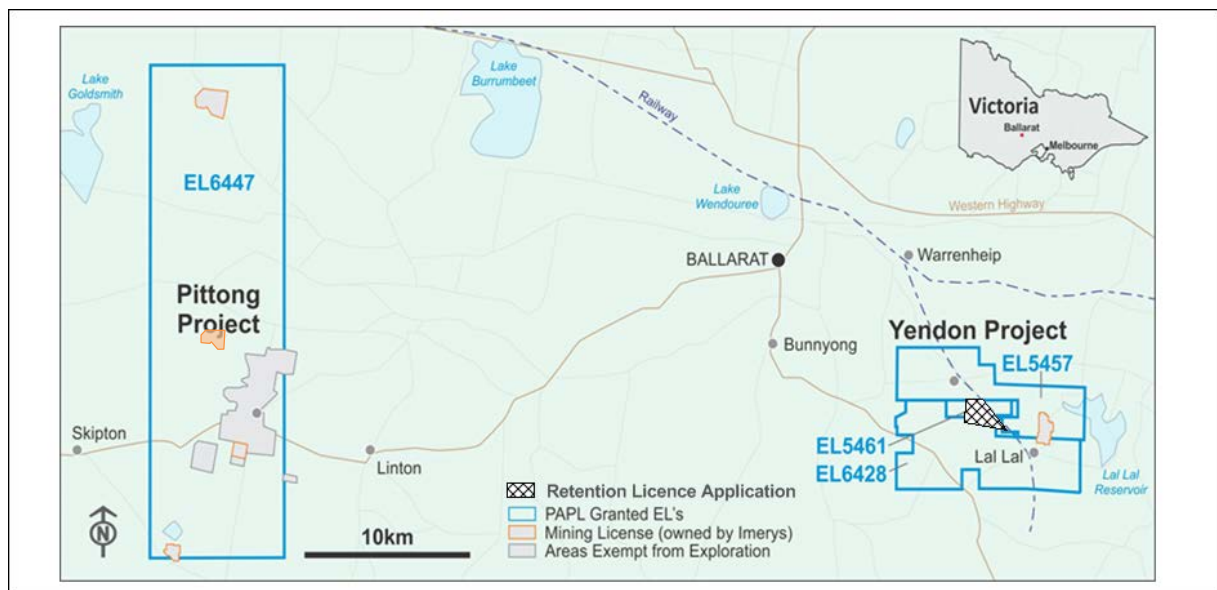


Figure 1: HEG HPA project location near Ballarat, Victoria

Following the successful completion of the pre-feasibility study (PFS) of the Yendon high purity alumina (HPA) project, Pure Alumina commenced work on the definitive feasibility study (DFS). In addition to the usual requirements of a DFS, Pure Alumina has prioritised work on reducing the capital and operating costs outlined in the PFS.

The PFS identified the acid regeneration plant as presenting the greatest opportunity for cost reduction and Pure Alumina has been working with acid plant suppliers and specialists to



develop a test program to optimise the acid regeneration plant operating parameters and to consider other technologies. If successful, material capital and operating savings are potentially available.

If the acquisition is successfully completed, this study will be continued together with work on integrating Polar's technology with Pure Alumina's process.

Hill End Gold Project

In June, Pure Alumina announced its decision to test the market for its gold assets.

PCF Capital is running the gold asset sale process and following strong participation in the data room review, a number of indicative offers were received. From this a short list of candidates was formed to undertake detailed due diligence resulting in final offers. A preferred bidder was then invited to advance their offer to completion however, due to difficult conditions in financial markets in the latter part of 2018, they advised that they required further time to complete financing. Pure Alumina has granted an extension of time.

Martin McFarlane
Managing Director

**Media - For further information, please contact: Paul Armstrong - Read
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Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

PURE ALUMINA LIMITED

ABN

74 072 692 365

Quarter ended ("current quarter")

December 2018

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(150)	(233)
(b) development		
(c) production		
(d) staff costs		
(e) administration and corporate costs	(477)	(1,096)
1.3 Dividends received (see note 3)		
1.4 Interest received	4	9
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Research and development refunds		
1.8 Other (provide details if material)		
Other income	2	6
Gold asset sale transaction costs (non- recurrent costs)	(28)	(33)
1.9 Net cash from / (used in) operating activities	(649)	(1347)

2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) property, plant and equipment		
(b) tenements (see item 10)		

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
	(c) investments		
	(d) other non-current assets		
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	Net cash from / (used in) investing activities		

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares		
3.2	Proceeds from issue of convertible notes		
3.3	Proceeds from exercise of share options		
3.4	Transaction costs related to issues of shares, convertible notes or options		
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 (provide details if material)		
3.10	Net cash from / (used in) financing activities		

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	907	1,605
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(649)	(1347)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	258	258

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	258	907
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)	258	907

6. Payments to directors of the entity and their associates

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

**Current quarter
\$A'000**

138

Directors' fees and salaries.

7. Payments to related entities of the entity and their associates

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

**Current quarter
\$A'000**

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Mining exploration entity and oil and gas exploration entity quarterly report

8. Financing facilities available

Add notes as necessary for an understanding of the position

Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
-	-
-	-
-	-

8.1 Loan facilities

8.2 Credit standby arrangements

8.3 Other (please specify)

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

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9. Estimated cash outflows for next quarter*	\$A'000
9.1 Exploration and evaluation	-
9.2 Development	-
9.3 Production	-
9.4 Staff costs	125
9.5 Administration and corporate costs	135
9.6 Other (provide details if material):	
Costs related to Polar Sapphire transaction and associated activities (non-recurrent costs)	251
Gold asset sale transaction costs (non-recurrent costs)	90
9.7 Total estimated cash outflows	601

* Please note that the above estimated cash outflows for the next quarter do not include expected cash inflows which may arise.

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2	Interests in mining tenements and petroleum tenements acquired or increased				

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.

Sign here: Date: 30 January 2019
(Director/~~Company secretary~~)

Print name:Martin McFarlane.....

Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly 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 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.