



20 January 2015

## ALTECH OPTIMISES BENEFICIATION PROCESS FOR ITS MECKERING DEPOSIT

### Highlights

- **Wet processing selected for beneficiation of the Meckering aluminous clay deposit**
- **Significant benefits include:**
  - **Superior alumina recovery**
  - **Lower capital and operating costs**
  - **Improvements in concentrate alumina grades**

Altech Chemicals Limited (Altech/the Company) (ASX: ATC) is pleased to announce that as part of the current Bankable Feasibility Study (BFS) for its high purity alumina (HPA) project, it has optimised the proposed beneficiation process for the Meckering aluminous clay (kaolin) deposit. The results of the optimisation program confirm the significant benefits of wet processing (refer Figure 2), previously dry processing which involved the initial dry crushing, drying and screening of the material had been contemplated.

The selection of wet processing is based on recent test-work conducted by Simulus Engineers and Simulus Laboratory's in Perth, Australia. The test-work successfully demonstrated that Altech's Meckering aluminous clay readily slurries in a water attritioner without the need for dry crushing and drying, prior to screening. In addition, superior recoveries of alumina were observed for the wet process, along with a higher finished concentrate grade, and consequently superior alumina yield.

Removing the dry crushing, drying and screening stages from the Meckering flow sheet has resulted in lower capital and operating cost estimates, a more efficient and simplified process, and reduced dust levels associated with beneficiation.

The aluminous clay concentrate (approximately 25,000tpa), will be used as feedstock for the Company's proposed HPA processing plant in Johor Bahru, Malaysia, and following beneficiation at Meckering the concentrate will be filter-pressed and bagged into 2 tonne bulka bags (see Figure 1), for shipment from Fremantle port in Western Australia to Tanjung Langsat, Johor Bahru, Malaysia.

The aluminous clay concentrate (kaolin) is benign in nature and contains no deleterious elements. Although commonly used as a filler or coating product in the paper and ceramics industries, as well as a critical ingredient for plastic, rubber, paint and cosmetics applications, the unique properties of the Meckering deposit, rich in alumina with low levels of iron and sodium, makes it the ideal feedstock for cost effective processing to 99.99% high purity alumina, as is proposed by the Company.

Figure 1 – 2 tonne bulka bag,  
for concentrate export



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Altech's managing director, Mr Iggy Tan said that he was extremely pleased with the outcome of the optimisation test-work, commenting: "the positive results from the wet processing test-work for the Meckering deposit has delivered multiple advantages, in addition to delivering higher alumina recovery and improved concentrate grade, the removal of the dry crushing, drying and screening activities from the Meckering flow sheet reduces the capital and operating cost estimates and simplifies the beneficiation of the material. Another successful finding for our BFS team, which is progressing well and on-track to meet the targeted completion timeframe of Q-3, 2015", he concluded.

Figure 2 – Proposed wet beneficiation process of aluminous clay (kaolin) at Meckering

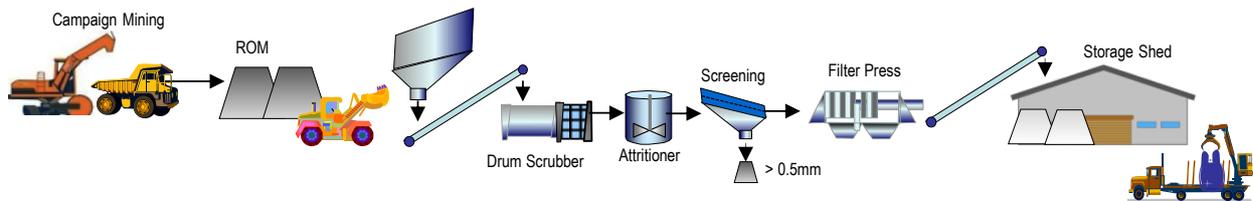


Figure 3. Altech's benign aluminous clay (kaolin) feedstock



Figure 4. Bulk samples collected from Meckering test pit for processing test work and analysis



Figure 5. Bulk aluminous clay (kaolin) optimisation testwork program lead by Simulus' Brett Lawson



-Ends-



**Altech Chemicals**  
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### **About Altech Chemicals (ASX: ATC)**

**Altech Chemicals Limited** (Altech/the Company) is aiming to become one of the **world's leading suppliers of 99.99% (4N) high purity alumina (HPA)** ( $Al_2O_3$ ). HPA is a high-value product because it is the major source material for scratch-resistant artificial sapphire glass. Sapphire glass is used to produce a range of high-performance electronic applications such as LEDs, semi-conductors, phosphor display screens, as well as new emerging products such as smartphones and tablet devices. The global HPA market is approximately 19,040tpa (2014) and is expected to at least double over the coming decade.



Current HPA producers use an expensive and highly processed feedstock material such as aluminium metal to produce HPA. Altech produces 4N HPA directly from an ore feedstock, aluminous clay, from its Meckering deposit in Western Australia. The Company is now advancing a Bankable Feasibility Study (BFS) to develop a full-scale **4,000tpa HPA production** facility. The Altech process employs conventional and proven "off-the-shelf" plant and technology to extract HPA from its **low-cost** and **low-impurity** aluminous clay feedstock, which results in **lower operating costs**.

Altech is a chemical processing group focused on creating a high-margin product to meet the growing global demand for the next generation of high-performance technologies.

### **Forward-looking Statements**

This announcement contains forward-looking statements which are identified by words such as 'anticipates', 'forecasts', 'may', 'will', 'could', 'believes', 'estimates', 'targets', 'expects', 'plan' or 'intends' and other similar words that involve risks and uncertainties. Indications of, and guidelines or outlook on, future earnings, distributions or financial position or performance and targets, estimates and assumptions in respect of production, prices, operating costs, results, capital expenditures, reserves and resources are also forward looking statements. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions and estimates regarding future events and actions that, while considered reasonable as at the date of this announcement and are expected to take place, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of our Company, the Directors and management. We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and readers are cautioned not to place undue reliance on these forward-looking statements. These forward looking statements are subject to various risk factors that could cause actual events or results to differ materially from the events or results estimated, expressed or anticipated in these statements.

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