



## QUARTERLY REPORT TO 31 MARCH 2012

### HIGHLIGHTS

- Construction of the Newcastle Iron Recovery Plant at Kooragang Island continues with modifications and improvements. This includes doubling the size of the iron chloride recycling section to provide greater operational flexibility.
- The Plant will recycle mill scale and spent pickle liquor from steel mills and produce iron chips or briquettes and strong hydrochloric acid.
- Austpac has been approached by a steelmaker regarding a bulk trial of contaminated fine iron oxide and a technology licence. The Plant has been configured to enable the recycling of other industrial waste streams.
- Following the recent substantial increase in synrutile prices, Austpac has received enquiries from two titanium metal producers regarding an ERMS SR plant in Australia to produce high grade feedstock.

### Newcastle Iron Recovery Plant

This report updates developments at the Newcastle Iron Recovery Plant. The project was conceived to recycle mill scale and spent pickle liquor from steel mills and produce iron chips or briquettes and strong hydrochloric acid for sale to the industry. The project commenced during the second quarter of 2011 following the mid-April 2011 signing of agreements with Kronos International Inc., for the provision of \$12.5 million to fund the construction, commissioning and initial operations of the Plant, together with other development work at Austpac's Newcastle facilities.

The project progressed steadily throughout 2011, commencing with detailed flowsheet development, plant design and ordering of long lead time equipment items. Construction accelerated during the second half of 2011 and continued during the first quarter of 2012 with foundations, process tower structures and ancillary buildings including the mill scale bulk storage shed and suspended plant room, relocation of the bulk gas storage area, the motor control center, and the power supply upgrade either well-advanced or complete. Most of the equipment required for the plant has been ordered and much of it has been delivered to site. Space limitations at our site necessitated the leasing of an off-site warehouse to store some equipment until required for installation.

Since the project's inception last year a number of engineers from Kronos' Leverkusen plant in Germany have visited Newcastle to familiarize them with our technology and to contribute their knowledge to the project and interact with Austpac's engineering team. This has included process engineers, project construction engineers and experts in computer modeling of chemical processes.

Recent process modeling suggested that a number of changes could be easily incorporated into the flowsheet to improve the operability and production flexibility of the Newcastle Plant. This led to a detailed technical review of the project which has continued throughout the first quarter of 2012 by the engineering team. The modifications necessitate increasing the size of some equipment yet to be ordered, so the plant will now be larger than originally envisaged and the capacity of the state-of-the-art acid regeneration plant has been doubled to give the plant sufficient flexibility to process a wide range of materials. The project budget has also increased and Austpac and Kronos are in discussions regarding project completion and financing terms.

The Newcastle team, led by John Winter, has been augmented by an experienced senior project engineer to assist the project construction and administration to allow John to focus on process engineering and plant commissioning.

John Downie, who worked with Austpac on projects in India, Newcastle, New Zealand and the Murray Basin from 2001 until 2005, rejoined the company in April 2012 as General Manager – Operations. John has worked in New Caledonia where he was responsible for the start-up and operations at INCO's Goro nickel mine, then became the MD and CEO of the Gladstone Nickel Project, and more recently has been involved with two ASX-listed resources companies.

## **Additional Opportunities for Austpac's Technologies**

The Newcastle Iron Recovery Plant will generate a revenue stream by producing high grade iron and strong hydrochloric acid. The operating Plant will also become a reference site to allow Austpac to demonstrate the technologies to parties interested in licensing the technology for use in steel mills around the world.

The Plant has been designed with sufficient process flexibility to handle other industrial wastes. Austpac intends to trial some of these wastes, including contaminated iron-rich dusts created during steelmaking and zinc-rich spent liquors from the galvanizing industry. Pilot scale work undertaken previously by Austpac indicates the trace metals can be collected as a separate stream which is potentially marketable. We have already received an enquiry from a steelmaker regarding a bulk trial to recycle material from a waste dump with a view to licensing and we intend to undertake this work in 2013. The cost of neutralizing and disposing of zinc-rich liquors is a heavy cost burden to the industry and treating such materials in the Newcastle Plant could generate significant additional revenue.

During 2008 Austpac demonstrated that the ERMS SR technology was able to produce a very high grade synthetic rutile with sufficient purity to be a very attractive feedstock for the titanium metal industry. Austpac has recently been approached by two metal manufacturers regarding the production of samples for plant trials. As the synrutile section of the Newcastle plant is still available the Company intends to re-examine the feasibility of an Australian synrutile plant once the acid regeneration/iron production section is fully operational.

Synrutile prices have increased over the past five years from ~\$500/t to over \$2,500/t, and with the ability of our technology to produce high grade synrutile as well as a valuable iron co-product, it is believed a commercial ERMS SR plant could be an attractive proposition.

## **EL 4521 (Murray Basin, Victoria)**

Australian Zircon N L has informed Austpac that the company has engaged several consultants to assist in the preparation of a Bankable Feasibility Study (BFS) on the WIM150 heavy mineral sands project and that the following work was conducted during the period January – March 2012:

- Hydrogeology: Groundwater evaluation work is well advanced, with a groundwater pump test completed on the Renmark aquifer.
- Resource Assessment: Work on a resource update continued.
- Environmental Studies: The Victorian Minister for Planning determined that an Environmental Effects Statement (EES) was required for the project. An EPBC referral was accepted by the Federal Government and communication with DSEWPaC is ongoing. Specialist environmental studies for the WIM150 BFS/EES were completed and draft reports are under review for 12 specific topics.
- Stakeholder Consultation: Meetings were held with 95% of landowners in the project area. Dialogue with other key stakeholders continued including DSEWPaC, DPCD, DPI, EPA, VicRoads, HRCC, GWM Water and registered aboriginal groups.
- Mineral Processing: Wet Concentrator Plant BFS testwork was completed which included the production of approximately 300kg of heavy mineral concentrate. Mineral Separation Plant BFS testwork commenced.
- Mine Planning: The BFS geotechnical work was completed. A potential mine area was defined showing infrastructure, process plant and geographic features, and a draft mine schedule completed. Characterisation of sand & slimes was completed for the tailings study and a potential location of a tailings storage facility selected.
- Infrastructure: Contact with power utilities is well advanced to determine the cost to connect to the state electricity grid. A power supply study is underway which will compare the cost of grid power to on-site generation using natural gas.
- Marketing: Contact has been made with potential customers for WIM150 products to give feedback on preliminary product specifications and guide future final product development.

For further information please contact:

Mike Turbott

Managing Director - Tel (+61-2) 9252-2599

*NOTE: This report is based on and accurately reflects information compiled by M.J. Turbott who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Fellow of the Australian Institute of Geoscientists and is a competent person as defined in the Australian Code for Reporting of Identified Mineral Resources and Ore Reserves.*

### **About Austpac Resources N.L. (ASX code: APG)**

Austpac Resources N.L. [ [www.austpacresources.com](http://www.austpacresources.com) ] is a minerals technology company currently focused on recycling waste chloride solutions and iron oxides produced by steel making to recover hydrochloric acid and iron metal. Austpac's technologies also transform ilmenite into high grade synthetic rutile, a preferred feedstock for titanium metal and titanium dioxide pigment production. The Company has been listed on the Australian Stock Exchange since 1986.