

16 July 2020

ZINC & IRON RECOVERY PROCESS UPDATE

The Company has carried out a review of the Zinc & Iron Recovery Process (“ZIRP”) following the results of the two melt tests conducted by the CSIRO.

The first melt test, which was reported earlier this year, demonstrated that a clean iron product with very few impurities could be produced. This product is ideal for making high purity pig iron for use in foundries.

The second melt test, which was carried out recently, was to evaluate the quality of the zinc oxide product. The Company is pleased to report that the zinc oxide content in the product was 87%, which is well above the 60% that is required for a saleable product for zinc metal production.

The tests carried out by the CSIRO have demonstrated that the ZIRP process is capable of processing two steel mill waste products, zinc contaminated furnace dust and spent pickle liquor, and transforming them into three separate saleable products; pig iron, HCl and zinc oxide.

Nevertheless, the test work carried out by the Company late last year at its Newcastle plant demonstrated that there are still some areas in the process which need further refinement before committing to a commercial plant.

In consultation with industry participants and the steelmakers who have carried out analysis of the process, it has been recommended that a pilot plant needs to be constructed that can run continuously for a period of 6 to 12 months before a commercial plant should be constructed.

The Company has retained Mr. John Winter, who has been instrumental to the design and test work carried out to date, to carry out a detailed review to provide the parameters of a pilot plant which can address the further refinements and process flowsheet improvements that are required for the commercialisation of the Zinc & Iron Recovery Process.

One of the considerations in the review will be the viability of the Newcastle plant given that the location of the pilot plant would be better suited closer to a feed source and that the current plant configuration may not be suitable going forward.

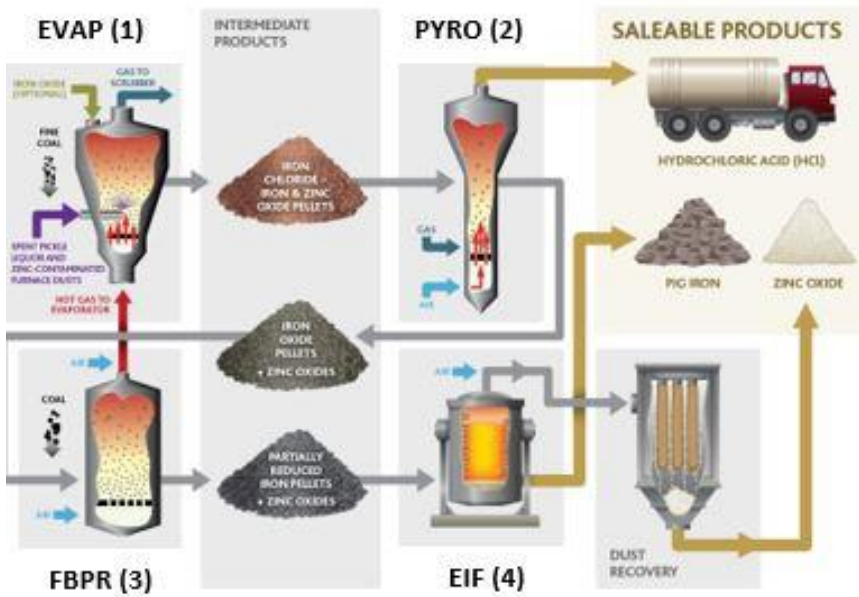
In the last year or so the Company has mainly relied on funding for its technologies from its major shareholder Yangang (Hong Kong) Co Limited. Given the impact of COVID-19 and internal Chinese issues, the Company cannot necessarily rely on future funding from that region. As such, the Company is considering other funding options and projects which

complement the current and traditional (mining and exploration) assets to increase shareholder wealth.

AUSTPAC’S ZINC & IRON RECOVERY PROCESS (ZIRP)

The Zinc and Iron Recovery Process takes zinc-contaminated steel furnace dust (BOF filtercake) and Spent Pickle Liquor (SPL) uses three stages to produce a reduced iron oxide-zinc oxide material suitable for smelting in a standard induction furnace (the last process stage produces two products, pig iron and zinc oxide as recently confirmed by the CSIRO tests).

ZIRP converts BOF filtercake and SPL into solid iron oxide-iron chloride pellets in the Evaporation stage (EVAP), converting the EVAP pellets into solid iron oxide-zinc oxide pellets in a fluid bed roaster in the Pyrohydrolysis stage (PYRO), and then treating the PYRO pellets in a fluid bed roaster to partially-reduce the iron in the PYRO pellets (the Fluid Bed Pre-Reduction stage (FBPR)) prior to conventional smelting.



Austpac’s ZIRP Process for Recycling Zinc-Contaminated Furnace Dust

By order of the Board

Kenneth Lee
Company Secretary
Austpac Resources N.L.

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

Austpac Resources N.L. [www.austpacresources.com] is a minerals technology company currently focused on recycling waste chloride solutions and furnace dusts produced by steelmaking to recover hydrochloric acid, pig iron and zinc.

Austpac holds exploration lease EL 5291 near Nhill in Victoria, which is prospective for zinc, copper and gold.

Austpac’s technologies also transform ilmenite into high-grade synthetic rutile, a preferred feedstock for titanium metal and titanium dioxide pigment production.