

INTEC TWO OPPORTUNITIES IN ONE COMPANY



A WORLD LEADER IN HALIDE BASED MINERALS PROCESSING HYDROMETALLURGY

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Patented extraction process progresses

By Tania Winter

WITH INTEC LTD'S Hellyer Residues project in Tasmania slated to start commercial production in 2009 and optimisation work continuing at its 50%-owned Hellyer Zinc Concentrate project, it seems the jury will soon be coming back with a positive judgement on the use of its Intec Process technology – for the recovery of metals from electric arc furnace (EAF) dust.

The biggest challenge, like all new technologies, has been convincing the market that the Intec process actually works and is commercially viable.

The patented Intec Process is a halide-based hydrometallurgical technology used in the recovery of base and precious metals from a range of minerals.

Intec managing director Philip Wood believes there is a huge potential market for the technology, particularly in China, which is trying to clean up its environment.

EAF dust is a waste from the recycling of steel.

"We have opened a Chinese representative office and appointed a person over there to promote the technology into China, but we are still a long way off signing any formal deals," he said.

"The Hellyer Residues project is still on the drawing board but we are reaching the end of the basic design process."

The technology was first expected to be applied to Intec's Hellyer tailings which was estimated to contain more than US\$3 billion of metal value, primarily zinc and gold, but also lead, silver and copper, before the rise in metals prices allowed the Intec Hellyer mill to be restarted to generate immediate cash.

Testwork demonstrated the Intec Process could recover the zinc, lead, silver and some gold and copper.

The company then proved the process on a semi-commercial scale to extract zinc, establishing a demonstration plant at Burnie in Tasmania in 2006.

This showed the Intec Process could be used for Hellyer tailings, as well as for the recycling and recovery of zinc, lead and silver and other metals from EAF dust.

EAF contract

In January 2006 Intec clinched a deal with Smorgon Steel (now Onesteel) and was paid an upfront treatment fee of \$2.42 million to recycle more than 20,000 tonnes of EAF dust via the Intec Process.

And in the middle of 2007 Intec proceeded to a stage two EAF dust contract with Onesteel, which agreed to supply a minimum of 14,000t per annum of EAF dust over the next three years.

The deal was a major milestone for



▲ The Hellyer mill in Tasmania.

Intec, as it secured the primary feedstock for the Hellyer Residues project.

The company would also like to pick up the remainder of Australasia's production of EAF dust, which amounts to a further 10,000 tpa.

As there is only limited supply of EAF dust in the region, Intec may look to tap into the larger markets of China, North America and Europe.

In the meantime, the Intec demonstration plant at Burnie is running campaign operations to refine the engineering of the Hellyer Residues project.

"All of this takes months and the final process flowsheet will not be determined until early next year," Wood said.

"That will then be accompanied by more tightly defined project economics and that will then put a net present value on the electric arc furnace dust project which should eventually find its way into our share price."

Intec's Hellyer Residues project is planned to be developed in stages.

The first will treat 25,000 tpa of EAF dust to recover the zinc, lead and silver as a high grade zinc sulphide or zinc oxide product, leaving only an environmentally stable iron oxide residue.

Offtake discussions were underway.

Chicken and egg

"It (securing offtake) is a real chicken and egg issue because our Chinese offtake parties want to know what our product will be and want specific details about percentages, the various payable metals, as well as what the various contaminants will be," he explained.

"You can safely assume that if we produce a zinc sulphide product, it will go to our existing Chinese smelter companies, but if we produce a zinc oxide product, we have not finalised any arrangements for that.

"We also have various collaboration agreements with people who would be able to supply us with additional zinc bearing feed.

"These can be quite small tonnages, such as from Ford Australia, but they can be other tonnages from other sources.

"One additional resource we do have which is in the region is the Zeehan slag dump, quite a large resource at close to 500,000t.

"Some parts of it are lower grade and it is only about 15% zinc equivalent.

"It has some technical issues in terms of treating it, but sooner or later we will be treating that resource."

In the interim, Intec is relying on the cash producing Hellyer Zinc Concentrate project –



▲ The Zeehan slag dump is an additional resource for Intec in Tasmania.

which will assist in the funding of the Residues project development.

This is a joint venture with Polymetals Ltd where the latter paid \$6 million towards the cost of restarting the Hellyer mill.

Polymetals, which will act as operator for four years or six million tonnes of tailings treated (whichever comes first), brought the Intec Hellyer mill back online very quickly.

And in December 2006 the Hellyer Zinc Concentrate project JV became the only new producer of zinc in Australia for that year.

Production has been strong with regular monthly shipments of around 5,000t of bulk zinc and lead concentrate.

Going forward, it is intended the Intec Hellyer mill will be operated on an ongoing

basis at the conclusion of the JV.

In this regard, Wood said the company was hopeful of long term business from Bass Metals Ltd, in which Intec retains a 24% stake in, and from other regional producers.

"At the moment Bass is treating ore on a small scale through Zinifex Ltd's plant at Rosebery, but in the bigger picture, it (Bass) has already discovered a lot of additional ore," he added.

Outside of that, Intec has done a collaboration deal with Outotec, the world's leading minerals processing technology group, to share technology, particularly the Intec Process to recover gold from difficult feedstocks.

Other, similar agreements are in the pipeline, according to Wood.