

BABS MCHUGH Welcome to another week of Resources Beat. I'm Babs McHugh, and good on you for tuning in. Today we'll learn more about the multi million dollar game of recovering minerals that have been left behind in the slag dumps that dot the Australian outback. And on the market it's definitely Uranium stocks day in the sun. We'll get the all ordinaries in just a moment – gold six hundred and US\$722.60 per ounce with Texas crude dollars US\$59 ½ us per barrel on Australian dollar 78.75 us cents

But one man's trash is another man's treasure, and that's never been truer than in the mining game at the moment. With base metal prices soaring and world supplies dwindling there's an emphasis on recycling slag dumps also known as slime dumps, mullock heaps, depends on where you live really. Now, although they are considered waste they often have incredible amounts of minerals worth millions of dollars locked up in them, and that's where mineral's processing company Intec comes in. It re-processes the dumps, gets rid of an environmental hazard – which is generally also an eye sore – and picks up a tidy profit along the way. Here's CEO Philip Wood.

PHILIP WOOD We've got a tailings dam in Tasmania at Hellyer, which is full of about 3 billion dollars worth of metal that the previous mine owners were unable to extract from the ore – so it went through into the tailings dam – and that's a mixture of zinc, lead, silver, gold and copper. We've got electric arc furnace dust stockpiles, which is the inevitable by product of scrap steel recycling by both Smorgon and OneSteel in Australia. When they recycle galvanized steel it has a proportion of zinc in it, and that zinc goes through into the electric arc furnace dust, which is environmentally very difficult to handle but we can get all the zinc out and render it benign. And then we have an old slag dump, an old lead smelter slag dump, also in Tasmania where they got all the lead out but they left all the zinc in it. And again its been sitting around as a sort of eyesore on the country side for the last 100 years, and again it represents significant value for us in cleaning it up.

BABS MCHUGH So let's take a look at that lead smelter slag dump, how do you go about extracting the zinc from the slag?

PHILIP WOOD The slag obviously exists above surface. It's actually quite literally on the road. You would excavate it, crush it, truck it to our plant which is about 80km away, and then it would be fed in to the plant together with electric arc furnace dust in a ratio of 5 parts slag to 2 parts dust.

BABS MCHUGH So you need the two for the process?

PHILIP WOOD It just optimises it. It helps it. You don't absolutely need it, but it is just the way our technical people decided is the best way to treat both feeds. So

you put it into what are called leach tanks. The leach tanks contain very strong chloride bromides solutions so it's a bit like the Dead Sea in Israel. Its got chloride and bromide, but its just like strong sea water which actually dissolves all the metals in the feed. The metal of the particular interest is the zinc, and once the zinc is in solution it's then purified and taken into an electrowinning cell, where it is electrowon onto a cathode as pure zinc, which is then available for normal industrial use.

BABS MCHUGH And what happens then to the waste product that is left over from that process?

PHILIP WOOD Okay, so that's now a totally benign product, and that goes out into our tailings dam at our site at Hellyer, which is a granted mining lease which is well controlled and quite easily managed.

Resources Beat programme then moves to other topics.