

Tronox CEO discusses TiO2 market softness and new direction

by [John Ollett](#)

Tom Casey, CEO of Tronox, speaks to IM about the market, and a revamped Tronox

Tronox Inc. has changed significantly since it filed for Chapter 11 bankruptcy on 12 January 2009. It has emerged a slimmed down and revamped company that eventually purchased the mineral sands business that belonged to Exxaro Resources, which was a leader in the production of titanium feedstock.

Tronox went into Chapter 11 bankruptcy, what pushed the company into this?

Tom Casey: Tronox separated from Kerr-McGee back in 2005 and then in 2006 there was a public offering. After that it struggled along for a couple of years as an independent company before it filed for bankruptcy in early 2009.

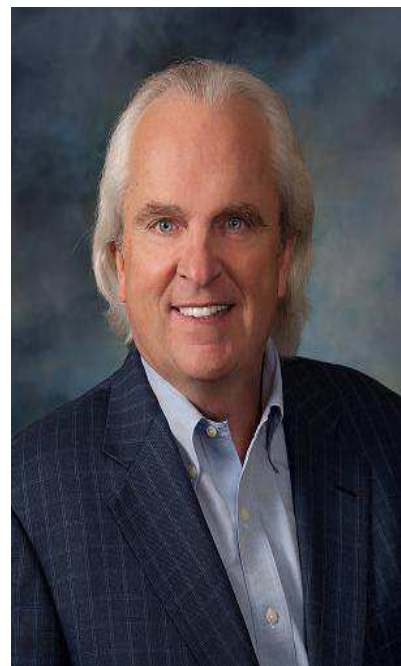
Although I wasn't there, my opinion is that Kerr-McGee wanted to sell itself back in the early part of the 2000 decade, and it discovered that there were parties interested in buying it but not with all of Kerr-McGee's environmental liabilities from the uranium mines and uranium processing centres and other very environmentally damaging businesses.

So, Kerr-McGee then transferred all of its environmental liabilities to its chemical division, and then spun that chemical division, including all of those liabilities, out in the form of Tronox.

That whole process is now the subject of some litigation in the bankruptcy court of New York City where the US government is suing Anadarko, the party that bought Kerr-McGee after they got rid of all their liabilities. Tronox also had a number of inefficient plants, some of which it had been operating historically and some of which Kerr-McGee had purchased in order to give what became Tronox a great scale in the spin off.

So, Tronox's \$2bn+ of liabilities plus these very high cost plants spread around the world and the global financial crisis, which caused a precipitous drop-off in demand, drove Tronox into bankruptcy.

In essence what we had to do was deal with the problem of the inefficient plants. We had one fairly substantial plant in Savannah Georgia. We have closed it completely and dismantled it. There was also, a plant in Uerdingen Germany, which was smaller, that Rockwood just bought [that has been under the control of an administrator since before 2009].



Tom Casey CEO of a revamped Tronox
Credit Tronox

Tronox got rid of the liability of operating those two plants and thereby reduced the overall supply in the marketplace by shutting down those manufacturing facilities.

Tronox Inc. Timeline		
March 2006	Kerr-McGee completes spin out of Tronox (began in Nov 2005)	
10 August 2006	Anadarko Petroleum Corp. completes purchase of Kerr McGee	
12 January 2009	Tronox files for Chapter 11 bankruptcy protection	
2006-2009	Tronox closes Savannah plant and puts Uerdingen plant under insolvency administrator	
14 February 2011	Tronox emerges from Chapter 11 bankruptcy protection	
15 June 2012	Tronox completes purchase of Exxaro Resources	

At the same time other pigment manufacturers were shutting down plants and about 7% of the total global production was taken out of the market in 2009. That is a pretty substantial reduction of supply in any market.

Then as the governments around the world began to react to this financial crisis, they initiated a variety of stimulus packages, in the US, Europe and specifically in China. Those stimulus programmes were directed, disproportionately, at construction expenditures.

In China, it was very much infrastructure – roads, bridges, and housing. Housing is a large consumer of titanium dioxide pigment, which goes into paint and plastics. It is also a large consumer of zircon, an ingredient in ceramics, and the Chinese market is a large consumer of tiles and other sanitary ware.

When the stimulus programmes took effect in 2010, demand recovered very quickly although it is now recovering in a market that is 7% less supplied than it was 12 months before. Very quickly, demand exceeded supply in the global market and as a result prices went up across the whole world from the end of 2010 to the end of 2011.

In fact, prices were probably up 60% or more in that period. So, very very substantial price increases followed. In that kind of a market, where supply is inadequate to meet demand, economics 101 will tell you that supply will, therefore, be allocated and the most efficient way to allocate it is with price.

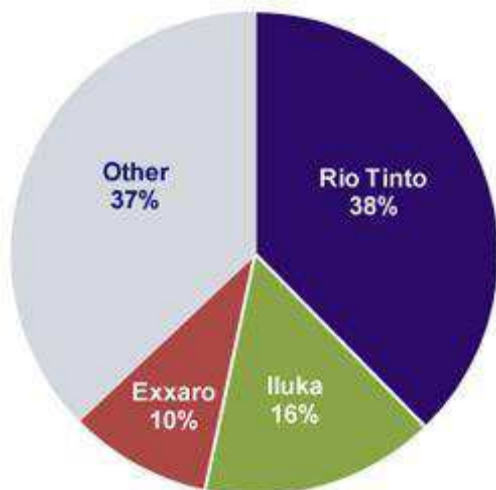
But the other way to allocate it, which was happening in the market, is where manufacturers state that they are not going to give a paint company all the pigment that they want because it has to be shared with everybody else.

Our customers began to see this, they began to see prices going up quarter-on-quarter, and they began to see supplies getting allocated and so, as a result, they began to buy ahead of their demand and buy inventory to protect themselves in case next quarter's price was higher or their supply suddenly became unavailable to them.

There was significant natural demand and then some artificial demand in the market place from the paint companies and coating companies in 2011.

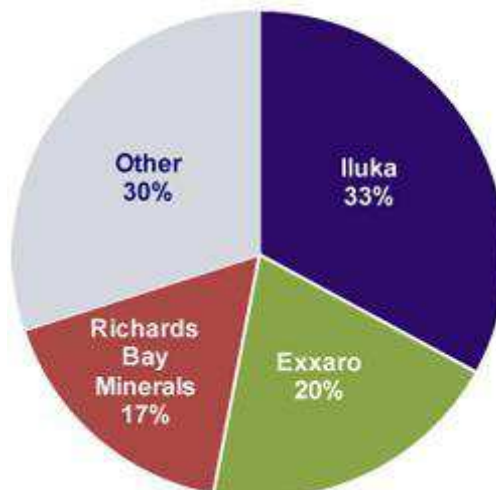
The other element is that most pigment producers had signed long-term supply contracts with the mineral sand companies back in 2009-2010. This meant that while they were raising their prices for pigment, they were not implementing corresponding price increases for feedstocks and therefore their margins were dramatically higher. It was a remarkable time to be in the titanium dioxide pigment industry.

Titanium Feedstock – Key Producers



Credit: Tronox Inc.

Zircon – Key Producers



Credit: Tronox Inc.

What plants are operating after the closures?

We have kept Hamilton, which is located in Mississippi in the US, and its capacity is 225,000 tonnes. Botlek, which is outside of Rotterdam in the Netherlands, which is about 90,000 tonnes, and Kwinana, and is in Western Australia near Perth, which has a capacity of about 150,000. So overall, our capacity is about 465,000 tonnes of chloride pigment globally.

How significant is the cost of electricity for Tronox's chloride plants?



Tronox's Kwinana Operations in Australia

Credit: Tronox

It is significant. We are, in fact, building a cogeneration plant in Australia right now to try to see whether or not we can take some of the gasses that the chloride process produces naturally and use that to power the generation station on our own site.

If that works, and we are building it as we speak, our hope is that we will substantially reduce our electricity costs because, as you said, they are a major factor in the cost of running these plants.

The capacity is roughly 15MW, it's not sufficient to take all of our demand but we wanted to start at a size that was large enough to be meaningful but not so large that if it didn't work out well right away we hadn't risked too much money.

After the electricity is generated it will be fed back into the TiO_2 plant to produce TiO_2 pigment and, potentially, synthetic rutile as well, because we produce synthetic rutile in Australia.

What brought Tronox to the decision to invest in Exaro Resources?

The markets were much stronger then they had been and so that was helpful and the new board went through a process where they evaluated, starting in February 2011, the options for Tronox: whether it should be sold, whether it should stay as it was, or whether it should combine with somebody else.

We decided that we wanted to be able to assure ourselves firstly of feedstock supply and secondly being able to capture the margin at both the pigment and feedstock levels of the supply chain. This would mean that we were no longer affected if the margin moved from one level to another level of the supply chain, which is exactly what is happening today.

Finally, we wanted to be able to optimise what we could produce in terms of feedstock and what we can consume in terms of pigment.

All of those things combined to convince us that the best strategic option was to try to combine with the mineral sands business of Exxaro, who we were already partners with at Ti-west in Australia.

We know each other very well, we have worked together for many years, and Ti-west is essentially a vertically integrated operation with a mine at Cooljarloo, a processing plant at Chandala, and a pigment manufacturing plant at Kwinana. We saw the benefits of vertical integration first hand, we saw Exxaro and felt very confident that we could expand this vertical integration structure across the entire company and work well with Exxaro as a major shareholder.

We started that the merger process in the spring of 2011.

Does the purchase of Exxaro give you an advantage?

We now produce 723,000 tonnes of titanium dioxide feedstock sand and we consume roughly 512,000 tonnes for our pigment business. That leaves us a balance of 211,000 tonnes to sell into the open market.

It gives us a huge advantage because it lowers our costs and it guarantees that we have what we need when we need it. It gives us the flexibility to shift our consumption in mineral sand production depending on what is happening in the market.

You may be aware that Iluka put out an announcement a month or so ago in which they basically said that they are concerned because the Chinese have stopped buying zircon, and that titanium dioxide pigment manufacturers have stopped buying their natural rutile and synthetic rutile.

I think that was an accurate statement as far as it went, but I believe the underlying reason behind why the titanium dioxide buyers had stopped buying Iluka's material and products is that Iluka has concentrated on producing high-grade, high-quality, and very expensive feedstocks – namely natural rutile and synthetic rutile.

When the titanium dioxide pigment business was selling everything that it could manufacture, the pigment manufacturers had an incentive to buy the highest-quality feedstock they could get because that resulted in the most tonnes of pigment production per tonne of feedstock and therefore, they paid the higher prices for natural rutile and synthetic rutile.

However, when the market for pigment softened, the pigment producers no longer placed such a high premium on producing as many tonnes as they could possibly produce and as the cost penalty to buy the high quality material was prohibitive, they all moved a portion of their demand away from the natural rutile and synthetic rutile that Iluka sold to titanium slag which Iluka doesn't sell.

The great thing about this market condition for us is that there are only two major western slag producers in the world: one is Rio Tinto and one is Tronox. And there are only two major western synthetic rutile producers: one of them is Iluka and one of them is Tronox.

We are the only company in the world that produces both slag and synthetic rutile. This means we can shift between them as our plants can consume either one, and the markets buy either one.

As the demand for one of those two (synthetic rutile or slag) increases, we can increase our consumption of the other and then sell the higher margin product out into the market which is a great advantage for us.



Aerial of Central Processing Plant at Empangeni

Credit: Tronox

What is the focus for Tronox in the future?

Our vertical integration is an enduring and very important advantage that we have; it lowers our cost dramatically relative to anyone that is not vertically integrated. We like that and we want to grow our business because we think that having this structure can be even more valuable if it is applied across an even larger business.

So we are interested in growing the business in general. Now, how we do that and when we do that, we haven't figured that out yet. But certainly we are committed to growth.

Is the softening in the pigment industry going to be permanent?

I think it is temporary. We have analysed what caused the reduction in demand which led to the price softening and a very substantial portion of it was destocking by the coatings companies. As I mentioned, we think that some of those companies bought ahead of their demand in 2011 when prices were rising and they were worried about being allocated shortages of supply so they bought ahead.

Since then, they have worked down those inventories that they built. But no inventory is infinitely large and so as they begin to destock, eventually there is no more surplus inventory to consume in

their products and therefore they have to start buying again. So for sure we think that element of the demand reduction will end and it will end in relatively short order.

Another element of the demand reduction is that the Chinese government which, in August-September of 2011, began to adopt policies that were explicitly designed to suppress or reduce economic activity. They were worried about inflation getting out of hand, they were worried about a housing bubble forming, and so they clamped down on economic activity generally and on housing in particular.



Tronox's wealth stockpiled - Tronox's great advantage is its captive minerals sand supply

Credit: Tronox

That period of the Chinese economy, we think, has had an effect – Chinese growth rates have been declining every quarter for the last four or five quarters – and eventually the Chinese government will think that they have wrung out all the excesses in their economy to a sufficient degree and then they will begin to stimulate the economy again or let it get back to its normal growth rates.

There are also hundreds of millions of people in China that are moving (not all on the same day mind you) from the countryside and into the cities where there are manufacturing plants and other sorts of business and those people all have to be housed. When they are housed there will be paint on the walls, plastics in the pipes, window frames and tiles on the floor and on the walls. That will also increase demand.

So, we think this is temporary and we are running our business on that assumption. We are slowing down our production rather than creating excess inventory because we think it will come back shortly and then we will be back in a relatively stronger market for ourselves.

A last word on the industry?

Over many many decades, titanium dioxide grows at the same general rate as GDP grows. So for the last year, GDP in all the regions of the world has been declining and similarly titanium dioxide growth has been declining and demand has been declining.

As the economies of the world stabilise and then recover, the demand for our products will increase and, although we can't predict when that will happen, we are very confident that it will happen. We are positioning ourselves through the vertical integration and through some operating efficiencies and some new products so that when it does happen we are very well situated to take advantage of it.