Regional waste provides a plastic pipe dream

RPM Pipe operates a growing family business in country Victoria making 100% recycled drainage pipes out of locally sourced plastic.

A long history of recycling plastic
RPM Pipe has been making pipes out of recycled plastic since the late 1990s in their factory in northern Victoria. Their innovative process uses 100% recycled High Density Polyethylene (HDPE) reprocessed from milk, detergent and similar bottles.

The germ of an idea
RPM Pipe grew out of a previous business supplying earth moving machines to farmers in Victoria’s Goulburn Valley. As Terry Kay, the Director of RPM Pipe explains: “There was a big move from glass to plastic at the time and we saw an opportunity to expand our business and provide an alternative to concrete and virgin plastic piping.”

This was during the early days of plastics recycling and kerbside collection services. Plastic is not very cost effective to reprocess if it has to be transported over long distances due to it being bulky and lightweight. But by chance a family member had recently been awarded the contract to collect kerbside recyclables in the area and agreed to supply them with plastic.

Growing the idea
Terry Kay, the Director of RPM Pipe is the first to admit that there was little in the way of a business case when they first started. “We had the idea and we jumped straight in. We had no background in plastics recycling. We just thought we would give it a go and see if it worked out. There was a lot of trial and error.”

In 1997, RPM built a small test machine and made its first pipe. When that was successful, they began to increase the size of the machine. “Through the first two years, we did so much R&D. We developed our techniques to make a really strong pipe,” says Terry. “There was no one we could go to for advice on how to do it and there still isn’t.”

“The whole recycling aspect and game has changed since we first started. Plastic has become a worldwide tradable commodity now. In the early days it wasn’t - it was a big risk. We had no idea whether it was going to work”.

Investing in new and innovative technologies
RPM’s commitment to R&D has continued to this day. The company continually reinvests their profits to make different size pipes and develop the manufacturing process to make it more streamlined.

“We’re still developing our machinery and converting them to better technology,” explains Terry. “We’re working on the process and developing a consistent product. It’s all a part of learning but you can only do that by making it and also learning from the mistakes. When there’s no manual or guide the only way to do it is to try it.”

<table>
<thead>
<tr>
<th>SNAPSHOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGANISATION</td>
</tr>
<tr>
<td>PROFILE</td>
</tr>
<tr>
<td>OBJECTIVES</td>
</tr>
<tr>
<td>CHALLENGES</td>
</tr>
<tr>
<td>NEXT STEPS</td>
</tr>
</tbody>
</table>
Benefits of a regional location

According to Terry, being located regionally provided two benefits during the early days. “We were close to the source [of plastic] and to our end market”.

RPM started by selling pipes to farmers in the local area. “Being located close to the farms meant that the farmers could visit and see our products,” says Terry. “This was really important at the time due to the negative perception of recycled products.”

Working with the market in mind

The company worked closely with farmers to understand their needs. As well as durability, RPM wanted to develop a really practical and useful product.

“We make our pipes in specific metre lengths,” explains Terry. “Concrete pipes come in an average size. Farmers wanted longer pipes so they could use one length of pipe under gateways so there was no join – and nowhere for it to crack. Farmers can pick up our pipes with a ute and trailer and it’s also easy for farmers to join the pipes together and they don’t need anyone to come in and weld it.”

Growing the business

In recent years, RPM diversified its market and now sells pipes across Australia. They discovered the hard way that relying on one industry for custom was risky for business. “The drought had a huge impact on our business,” says Terry. “At that stage we were only supplying to local farmers and our sales dried up. We realised we needed to diversify our end market to survive. We developed a reseller market and now have a full time sales rep.”

RPM’s next steps are to continue investing in the business and to benchmark their products against recognised standards. RPM recently received several grants from the Victorian Government to carry out more scientific analysis on their pipes. Accreditation will make it easier to tender for business in new industries such as construction.

“We want to develop our business as far as it can go. We know that we’ve got something very unique,” says Terry. “I want to get to a point where all industries see our product as being just as good as a virgin product but with the advantage of it being recycled. Being recycled is not going to win you the game. At the end of the day it comes down to quality and price.”

“I think there is a lot more opportunity in waste and resource recovery in Victoria, especially in regional areas.”

Terry Kay, Director, RPM Pipe