

Finding and fixing underground water leaks can generate huge savings

NZ Bakels manufactures and distributes a wide range of bakery ingredients to industrial bakeries, and to the craft and food service sectors. The company has a manufacturing facility in Penrose, Auckland employing 75 staff.

Typically, manufacturing and food processing industries consume the largest proportion of water among non-domestic customers. NZ Bakels' average water consumption in 2012 was 86kL per day, which the company considered normal for its business. However, periodically the water usage was disproportionately high despite no significant change in the operations. In the previous five years, the business had dealt with the issue of underground leaks four times, each time identifying and repairing the leaks individually.

When the same problem occurred in September 2012, the company hired a specialised service to detect and repair the leak. But this time, the company decided to replace the old underground watermain with an overhead stainless steel watermain.

In January 2013 the connection was changed over to the newly installed watermain and the company immediately saw a 50 percent savings in their water consumption.

“We did not expect that replacing this underground water pipe would generate such huge savings. It does confirm the fact that underground water loss can hugely increase consumption. Since the pipe replacement, we have learnt not to assume that our water consumption is the ‘norm’, or that our processes are necessarily the most efficient use of water for our business.

“We are keen to reduce waste in the business and ensure that our operations are not impacted by such leaks. The most important takeaway from this is that monitoring your water usage regularly and inspecting your operations for efficiency at each stage is not just good environmental and operational practice, it's sound financial sense too” said Brad Taylor, Operations Manager, NZ Bakels.