

Chlorine Champion

It's not often cited as the saviour of the world, but to Craig Freeman chlorine is a greater gift to humanity than sliced bread. **Hugh de Lacy** explains.

Chlorine, that greenish poisonous gas that slaughtered thousands in World War One and in more than a few regional conflicts since, has saved more lives than any other industrial/medical breakthrough, Craig Freeman of Filtration Technology – better known as Filtec – is eager to point out.

Found in nature only in compound form, most notably with sodium to form common salt, chlorine's oxidising properties allow it to combine directly with most chemical elements, including the hydrogen and oxygen that make up water.

Chlorine combines readily with water to produce a disinfectant effect that has made it the global mainstay in the treatment of water supplies to make them safe and potable.

Freeman, one of the founders and a shareholder of Auckland-based Filtec, likes to point out that when chlorine was temporarily removed from some South American water supplies in 1991 because of its undeniable toxicity as a free element, 12,000 people died from waterborne diseases as a result.

"Chlorine is credited with saving more lives than any other chemical, medicine or industrial process," Freeman says, and it's the key element in the Filtec water and wastewater treatment processes that the company designs and installs in water supplies around the country.

It's the simple but reliable key to safe water supplies worldwide, he adds.

Freeman started out in the water business with MacEwans Machinery at Kaiwharawara, Wellington, completing a fitting and turning apprenticeship with that company in 1980.

McEwans had previously been owned by Fletcher Building which sold it to New Zealand Steel and Tube which in turn bought out JJ Niven's nationwide water treatment business in 1983.

When Steel and Tube subsequently set about selling off all its subsidiaries not directly related to its core steel business, the water treatment branch was bought by Graeme Thacker and one of his aunts, with

Freeman a shareholder.

They named the new company Filtration Technology.

Thacker and Freeman later bought out the aunt, and Thacker served as founder and senior advisor until retiring in 2013.

About a year later the company began trading as Filtec.

In the meantime Matt Ewen, a Filtec project engineer who had been with the company since 2004, and shown drive and business competency beyond his years, had bought into the business.

Later he and a colleague, David Rouse, bought Thacker's share between them, and 18 months later Ewen bought out Rouse, leaving himself and Craig Freeman as joint owners, with Matt Ewen the majority shareholder.

In the face of the mounting public concern over the state of the country's vast natural water supplies, and with Ewen driving the expansion, Filtec has been in a sharp growth curve for the past half-decade.

During 2014-2015 it built itself new premises on Carbine Road in Mount Wellington, Auckland, including a stainless steel fabrication shop, a separate mild steel fabrication shop and a further separate PVC manufacturing and assembly plant.

Staff numbers have risen to around 50 and turnover to about \$20 million a year, and the company has a full and growing list of projects – 10 to 20 on the go at any one time – here and around the Pacific.

Filtec has designed, built and supplied filtering systems to the Philippines, Australia, Fiji, Tonga and Papua New Guinea, while it has eight service sites, each with its own manager, around the country, and full-time offices in Wellington and Dunedin as well as the Auckland headquarters.

There is also a part-time office in Melbourne.

The managers include fully qualified engineers from a regular United Nations of homelands, reinforced by Kiwis often recently returned from the ritual Overseas Experience.



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Craig Freeman



Craig says that, besides the miracle effects of combining chlorine with water, the biggest driver of the business is health and safety, with a fulltime H&S specialist on the staff, and site audits being a key element of Filtec services.

The core business of the company is building water and wastewater treatment plants, with activities broadly divided into equipment supply, design-and-build, and project management.

Among Filtec's major clients is the cooperative dairy giant Fonterra, for which it has completed a number of projects including the \$4 million Lichfield treatment plant in the Waikato.

It's currently starting on another Fonterra project, this one in Victoria where it recently completed an installation for another company.

At the other end of the scale Filtec has built portable systems in containers for the likes of the Tokomaru community in the Manawatu, which had been battling with unsafe supplies for years.

Filtec supplied the successful Tokomaru system for around \$150,000.

Freeman rates people as the company's biggest asset. "We've consciously tried to bring young people through to be trained by our older and most experienced engineers."

This is partly motivated by the recognition of our country as a small market in which survival is dependent on a reputation for service.

"Make mistakes in our little market, and word gets around really quickly."

The same awareness of the client's needs governs the outreach to the Pacific and Australia.

Within the wider industry, Filtec is actively involved with both Water New Zealand and the Water Industries Operations Association of Australia (WIOG), on which staff member Greg Gordon has served as a committee member.

The company's founder, Graeme Thacker, was a staunch supporter of Water New Zealand, and is one of only four people to have been awarded its service medal for volunteer work.

The company continues its close association with the association, with Ewen chairing its young water professionals group, and Freeman involved with the Ministry of Health in developing national drinking water standards.

It's this latter association that has heightened Freeman's appreciation of the nasty green gas that makes otherwise contaminated water safe to drink, and he shakes his head at the continued ignorance and fear that it brings out in sceptics.

"The challenge for the industry is to educate the public on the value of safe clean water delivered to the tap," Freeman says.

"Only then will our industry be fairly recognised and rewarded." **WNZ**