

Mr Hands On

From his first day of work, Keith Davis has been immersed in the water industry. He talks to **Mary Bell** about a career that dates back to the 1950s.

Although Keith Davis has retired and his 84th birthday is approaching, water and wastewater is still a passion. In fact, if you'll excuse the pun, he has kept his fingers in the pool until fairly recently. Throughout the years, his hands-on approach and technological expertise has made him a formidable asset for the industry.

Keith began work in late 1950 as a laboratory cadet with the Auckland City Council while he was studying for a Diploma in Chemistry at Seddon Technical College at nights. He was based at the water laboratory at Titarangi, and later transferred to the lab in the old pumping station at Western Springs, where he was involved in the analysis of water, soil and compost.

This was a far cry from his childhood dreams to become a doctor, but the money simply wasn't there to put him through medical school. However, the science of water and waste piqued his interest and he says he has no regrets about the direction his career took.

In 1954 he got a job as a chemist's assistant with the Auckland Metropolitan Drainage Board and here he first encountered fluoridation and the hysteria that surrounds it.

As we know, tap water is fluoridated to strengthen children's teeth, but from its introduction in the mid 1950s, Keith says "the anti-lobby was vocal, screaming toxic, dangerous and



At nearly 84 years old, Keith Davis retains a strong interest in the water industry.

mass medication" amongst other protests. A big issue was that fluoride supposedly accumulated in the body. In a top-secret project, Keith was to test exactly that.

"My plan was to make up and verify the strength of a one part per million sodium fluoride solution and drink about a litre a day for five days," says Keith. He would then take urine samples and test if there was any fluoride present.

"It was eventually shown that of the fluoride ingested about 70 percent of it was excreted within about three hours of ingestion," he says.

While Keith readily admits the whole programme would now be considered primitive, his findings were checked by a government analyst who concurred with Keith's interpretation of the results.

Dr Dove-Myer Robinson, at the time chairman of the Drainage Board and a staunch member of the anti-fluoridation



Keith nearly lost his life this day in 1981. He had been collecting samples of bunker oil from the ship when he was caught unaware by a large wave and knocked off his feet. Adding insult to the dunking and near drowning, he got covered in bunker oil.

lobby, sparked the testing programme but was incensed when he heard the results.

“Eventually he accepted that I had acted in a professional manner and he was assured by all that the test results were valid and that I would not die,” says Keith. “He was rather upset and wanted all testing to stop, any test result papers destroyed and anyone involved was not to say anything more on the subject.”

Keith’s boss, Ron Hicks, made a comment that has stuck with him ever since: “Such is politics – they usually get what they want but not in this case, and well done.”

From that time Keith has been passionate about the subject of fluoridation and a keen promoter of it.

“Everyone is entitled to their view,” Keith told *Water Journal*. “All I do is provide them with the facts, what they do with them is up to them.”

Another such example came a few years later in the 1960s when Keith determined the weed problem in Lake Rotorua was mostly caused by farming, not sewage, as was the popular belief at the time. He received a paltry £600 for his work and the results were pooh-poohed. Years later, and at a cost of many millions of dollars, a study confirmed his findings.

Keith always enjoyed getting out in the field, preferring to be in a hands-on role rather than stuck behind a desk in management. In 1981, he was called to General Motors in Trentham where there appeared to have been a chemical spill, complete with dead pukekos and eels.

On arrival, it looked as if the big caustic soda bath, used to strip grease off imported truck panels before painting, had leaked and contaminated a local stream. Keith spent three days diligently working and determined that it was industrial sabotage, made to look like a spill.

“I have always prided myself in doing things methodically,” says Keith.

He retired in 1991, and promptly took up a position as a distant learning tutor for the Open Polytechnic in Lower Hutt and laboratory tutor at the Central Institute of Technology in Upper Hutt.

He had already had some previous experience as a tutor and was good at it.

“The students liked my style of teaching as I used anecdotal stories to back up the theory.”

For Keith, who is a foundation member of the NZ Water and Wastes Association, education is key to improving the water sector performance. He would like students from an intermediate of secondary school level to be learning water treatment, waste treatment and disposal.

He also says we need to wake up to the fact that climate change is real and work out what needs to be done to accommodate long dry spells and serious flooding.

“All the organisations that have an interest need to get around the table and sort it out,” he says. “Life could be made a lot better.” **WNZ**