NEW ZEALAND Trade & Industrial WATERS FORUM



# Short & Slappy NZTIWF Newsletter

### Winter 2023

## Kia ora,

Welcome to our Winter 2023 newsletter. The current focus for the Board is the upcoming Industrial Waters Conference in Hamilton. Organising a conference with a trade and industrial water focus poses big challenges this year, especially amidst uncertainty about water reforms, an impending election with its full range of political promises, and ongoing disruptions caused by extreme weather events, as well as cost of living and budgetary constraints across society.

On a positive note, both industries and individuals are eager to find solutions that reduce water usage and waste volumes. We've been fortunate to secure speakers for the conference who will provide valuable ideas and products to potentially assist in addressing these pressing issues. Join us in Hamilton to have your say on where

to from here!

I'm looking forward to meeting you in Hamilton next week. Let's not talk about the rain!

Ngā mihi. Jennifer Leadley - NZTIWF Executive Officer



# Industrial Waters Conference 2023

TWO weeks to go before we kick off Industrial Waters 2023. We anticipate another successful conference and meeting both regular and new delegates.

The fantastic line up of speakers includes Simon Upton, our Parliamentary Commissioner for the Environment, Vaughan Payne the interim CEO for the 3 Waters reforms leading the charge for Waikato, Bay of Plenty and Taranaki. Emeritus Professor Ralph Sims from Massey University presenting on the impacts of climate change on water, and more.

For those of you that are yet to take up the opportunity to join us at the Industrial Waters conference registrations are still OPEN.

The updated programme can be viewed at <u>https://confer.eventsair.com/nztiwf2023/</u>programme-overview, along with

### **NZTIWF Annual Awards**

Each year NZTIWF presents awards to its members at the annual conference dinner for their services to the Forum, industry, and/or their community. The nominations for awards can be made by any member of the forum for themselves or another member. A member's colleague or manager (even if they are non-members of NZTIWF) can nominate a forum member for the awards. The Nominee must be a current financial member of NZTIWF.

The following awards are open for nominations:

**Best Science** – The nominee would have used best science practices, techniques, or technology to make a significant improvement in their field of work that resulted in improved processes, and/or possibly cost savings.

**Environment Champion** – The nominee would have implemented and used systems in their place of work where environmental gains have been made. These could be systems change, discharge management or regenerating where there is a positive impact on the environment.

**Bob McWilliams** – (The nominee for this award can only be a Tradewaste Officer or Compliance Officer). [Bob McWilliams was a Tradewaste officer for many years at Hastings Council and a member of the Forum who passed away in 2018] The nomination can be made for recognition of an officer's contribution to their community or to the forum.

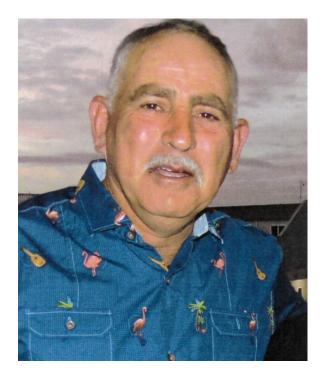
A brief explanation about the nomination detailing their achievements is required. The nomination is to be in writing and sent to the NZTIWF Executive Officer via email (nztiwf.org@gmail.com) by Monday 7th August 2023.

Awards for the Best presentation by a Tradewaste Officer and for the Best Industry presentation will be presented, with the winners being nominated by the NZTIWF Board only.

## Liquid & Hazardous Wastes Code Compliancy

Congratulations to the following companies that have renewed their code compliancy status

• Intergroup - Whangarei



# Bruce Bain (29 March 1959 – 2 May 2023)

Bruce, the owner and powerhouse of Bains Liquid Wastes, a long-established liquid waste collection company based in Te Awamutu, sadly passed away in May after a courageous battle with cancer – he was always determined to beat it but unfortunately that wasn't to be.

Bruce was a hardworking, sincere, and humble man with a genuine willingness to help others, even if that meant going out to service tanks after normal work hours or on public holidays. From its inception Bruce was a great supporter of WasteTRACK and the CODE COMPLIANCY program, with Bains being an early adopter of WasteTRACK. At the time of his passing Bruce and his company were developing a new treatment facility for liquid wastes – this will continue as a legacy to Bruce's determination to keep going no matter what. Bruce was actively involved in the community especially Te Awamutu rugby, having both played and coached until recently and as member of the Highland Pipe Band.

Bruce was not only a liquid waste contractor and business associate to many at NZTIWF, but most importantly he was a friend. We send our sincere condolences to Michelle and the family.

## The Board's Insightful Industry Member.

Rosstan joined the Forum only a few years ago and was starting to help the board inject some life by building traction with Industries. Nature had another call on this – Cyclone Gabrielle had such an impact at their Woolworks Plant in Napier that he has spent a lot of this year focused on matters related to the recovery effort. WoolWorks is on-track to have the plant operational before the end of 2023.

WoolWorks is the only wool scouring service provider in NZ, processing more than 100 million Kg' of wool annually from their plants in Hawkes Bay and Timaru. They have invested significantly to decarbonise their operations, with their Timaru site now close to carbon neutral, which is great news. Rosstan has recently been made the new CEO of WoolWorks Ventures which will focus on innovation, technology and growth. Congrats Rosstan!

Rosstan Mazey - Industry Rep

Besides work Rosstan lives with his family of all females in Wellington, supporting his girls' sports from the side line. A big fan of sports both on and off the field, he played social rugby while at Otago University in his young days. Once he ended up opposing then All Black Marc Ellis. The beer afterwards must have tasted nice and hope jerseys got swapped! Rosstan is driven to get best outcomes for his team and the overall wool sector. This bodes well for the Industry and NZTIWF.

## Taranaki Trade Waste Officers.

Gary Soper - TWO rep

Recently, a get together was held in New Plymouth for the Trade Waste Officers from the three local authorities. During the event, they visited the following locations/sites.

#### Site 1 – Tegel Food's Processing Plant

Tegel's pre-treatment facility uses a Dissolved Air Flotation (DAF) plant for the removal of fatty solids from the waste stream. The separated solids then undergo a dewatering process through a belt press. Once dewatered, the solids are stored in 2m<sup>3</sup> bins, which, when filled, are placed in a refrigerated shipping container to minimize any potential odours. These containers are later transported off-site for final disposal.



Sian Horton (Stratford DC) and Komal Devi (South Taranaki DC) (Rotary Fan press in back ground)

#### Site 2 - Septage Dewatering Facility

A high portion of tankered waste (approximately 400 to 500m<sup>3</sup>/month) is dewatered at a contractor's dewatering facility (Gas & Plumbing Ltd).

The waste undergoes processing through a rotary fan press, with the contractor having two units available—the one depicted below, along with a smaller, similar unit. After dewatering, the solids are stockpiled until enough accumulates for transportation to a landfill located 200km away using a truck and trailer.

The company has recently taken delivery of three shipping containers from overseas full of waste processing equipment including an additional larger Rotary Fan Press and containerised screening plant.



Labratory.

#### **Comments from Geoff Young** External liaison for the NZTIWF

Geoff is actively engaging with central and local government and a wide range of interest groups ensuring that the voice of NZTIWF is heard. Keep an eye out for Geoff's personal commentary and views via his LinkedIn account.

https://www.linkedin.com/in/geoff-young-36486839/

Every newsletter we include a column from Geoff touching on some of his latest views as it affects NZTIWF members and the broader evolving water system. These view's expressed by Geoff are his personal opinion rather than policy of the NZTIWF.

### Site 3 - New Plymouth Laboratory and Waste Water Treatment Plant

A discussion with the laboratory lead gave a good understanding of the scope of sample analysis, which is undertaken in the Lab. A brief tour of the wastewater treatment plant followed which included viewing the plants Ishigaki Screw Presses which are used to thicken the solids before being processed through the Thermal Dryer.



Tegel.

Screw Presses

Cleaner Production, a change of topic to prove I am not just a grumpy old man!

With the dilution of the 3 waters reforms and the threat of repeal and all the other insanity of an election year, let's leave 3 waters with the politicians even though I still don't believe any of them have grasped the gravity of the issue. All of them are an outstanding example of "there are none so deaf as those who refuse to listen"! The proliferation of promises being made by all parties that there is absolutely no chance of delivery on is deafening. Just as well, performance is based on best attempt tick box exercises and how it can be spun rather than actual delivery in politics!

Let's instead talk about efficient use of water and raw materials in our commercial and industrial sectors, something I am equally as passionate about.

Although we don't theme our Industrial Waters conferences, there is going to be quite a focus on water and raw material efficiency at the upcoming industrial waters conference in Hamilton. This focuses on changing the mindset when it comes to water and not accepting wastage because "that's how it has always been done".

Our New Zealand Dairy industry have had a real focus on water usage and raw material utilisation on the manufacturing side which has its roots in the late 1970s early 1980s. It came as a bit of a shock when they figured out that between 5 and 10% of the milk coming in the gate was going down the drain in their factories so set about doing something about it.

Initially, it was about measurement, getting a handle on the size of the problem, to quote almost all self-help books on management, "you can't manage what you don't measure"!

This started with quantifying start-ups and shutdowns of processes and establishing a baseline and then working on how much of that was preventable waste. What followed was comprehensive monitoring of outputs, basically monitoring stations on all drains out of the factory.

This led to the development of best practise benchmarks for different types of processes. What also showed up was the water usage, processes being left on water for extended periods discharging straight to drain rather than recycling. Finally came the water recovery for re-use and the capture and reprocessing of cleaning chemicals for reuse which started in the nineties.

Today the industry is working with technologies to clean up the likes of

milk condensate to provide a usable water supply. The bulk of the Fonterra commodity plants now run at less than 1% loss or to use dairy terminology, better than 99% yield. Water usage is below half what it used to be per litre of milk processed and chemical usage is probably down to a quarter. The financial returns to Fonterra and to its cooperative farmers over the past 40 years have been huge, the benefits to our environment of these improvements are also massive. In management speak, this would be called "cleaner production", but cleaner production methods and philosophy don't require a massive complex process to reap benefits.

At this year's conference, we have a number of presentations talking about optimising water and raw materials. This ranges from a primary producer maintaining a relatively closed loop system to contain and re-use all water on site to a system designed for medium scale Laundry cleanup and reuse to a process engineering company talking about application of cleaner production technologies as it applies to wet processing facilities.

Cleaner production is not just another piece of trendy corporate speak, it is an operational philosophy that can be applied to almost any commercial operation and return benefits to the business, the staff and the local environment.

That's all from me for now, I look forward to seeing you all at Industrial Water in Claudelands Hamilton in August.



Geoff Young - External Liasion.