

Flow Back



Newsletter from the Water New Zealand Backflow Group

Issue 17, October 2016



Backflow

WATER NEW ZEALAND | SPECIAL INTEREST GROUP



A Word from the Chair

Contents

A word from the Chair and Conference 2017

Australian Backflow Conference 2016

Master Plumbers 2016 Conference

Backflow Incident

Welcome to the latest edition of Flowback.

SAVE THE DATE! Your Backflow Group will be holding its biennial conference at the Trinity Wharf Hotel, Dive Crescent, Tauranga on **Thursday 3 and Friday 4 August 2017**. Mark this in your calendar so as not to be disappointed.

Your committee is working to develop an exciting and informative programme for the two days. Our intended target delegates are Backflow practitioners, territorial water utilities, regional councils and Ministry of Health water assessors. Although the finer details are still to be completed, we are intending to hold the delegate registration around the \$300-\$350 mark, including conference dinner and daily catering.

Given the recent problems that Havelock North has been experiencing with their water quality, we are confident that a good number will attend.

And while referring to Havelock North, there is a proposal to have a general meeting/forum with the Asset Managers of the local authorities in that area within the next couple of months to discuss backflow and cross-connection issues; what they are doing well and what they are doing not so well. Our group has been asked to facilitate this event and to provide information to assist them in moving forward. Our group will also be watching with interest the outcome of the Government-instigated inquiry.

Graeme Mills – Backflow Group Chair

Social Media

The Backflow SIG are now on Facebook and LinkedIn. If you haven't joined these groups already please do so now. The committee looks forward to the discussions the members will create through these channels.



Facebook



LinkedIn

Please note: you will need to be logged in to view the Facebook page.

BACKFLOW PREVENTION ASSOCIATION OF AUSTRALIA CONFERENCE 2016

The National Backflow Prevention conference was held in Sydney from 28-30 July. It was the first time the conference has been held in Sydney and it attracted 80 plus delegates from as far afield as Fiji and New Zealand. It addressed many of the issues currently affecting the industry, including regulatory issues, standards, training and operational concerns with pressure drop and flow reductions.

More than 20 papers were delivered over the two and a half days, and for the first time the conference included a half day contractor workshop where contractors had the chance to see testing undertaken to the current standard and to gain hands-on experience.

Many thanks to the organising committee for their hard work in making this a success, to our speakers and to our sponsors: Sydney Water, LWG ZURN, Halgon, MPAQ, Hydroflow Distributors, All Valve Industries, IAPMO Oceana, ValvCheq by Pentair and Apollo Valves / Conbraco Industries.

Disclaimer: The views and opinions expressed in this article are those of the authors and do not necessarily reflect those of Water New Zealand.

JOINING TOGETHER AT MASTER PLUMBERS 2016 CONFERENCE



2016 saw your Backflow Group join forces with the NZ Society of Master Plumbers at their Plumbing Conference held in Rotorua in early April.

The Backflow Group presented workshops on a range of topics related to not only the plumbing industry but to protecting the potable water supply.

Backflow Group Chairman, Graeme Mills, welcomed the 50+ delegates with the question “*What is backflow and why should we care?*”

The first presenter was Jon Lewis, a plumber, backflow practitioner and tutor of the NZQA backflow courses. Jon showed examples of how to install devices correctly with an emphasis on compliance, common mistakes being made and provided an insight into how things can go wrong hydraulically if an incorrectly sized device is installed.

After morning tea Kevin Healy presented the next session on the legal obligations regarding backflow prevention. The NZ Building Code requires backflow to be installed as near to the potential source of contamination yet under section 69 of the Health (Drinking Water) Amendment Act 2007 the opening statement of section 69 is – ‘*The purpose of this Part is to protect the health and safety of people and communities by promoting adequate supplies of safe and wholesome drinking water from all drinking-water supplies*’.

Furthermore section 69ZZZ states - ‘*This section applies if a networked supplier considers that there is a need to protect the networked system from risks of pollution caused by water and other substances on properties connected to the networked system*’.

Is there a conflict or is one area of legislation not sufficiently robust and installations so suspect that boundary protection is necessary?

Usually at full day workshops, the first session after lunch proves difficult to try to keep delegates awake. Graeme Mills presented this session of ‘*Backflow Prevention Programmes: What they should look like and where to get assistance in developing one of these*’. Tauranga City Council has a fairly robust backflow program where they test the boundary devices (their choice) and have an independent audit of 10% of the tester work. They also carry out 5-yearly property surveys to ensure that their water network is still protected – we can’t rely on Change of Use.

The last session was presented by Aaron Rink, a flow consultant and backflow practitioner. Aaron’s presentation related to the Hamilton City Council’s ‘*Backflow Philosophy*’ that really changes the whole dynamic on backflow when building consents are applied for.

The Backflow group’s view is that if every regulatory authority took the Hamilton City approach, it would reduce the confusion and uncertainty around protecting the potable drinking water.

In parallel with our afternoon session, the Master Plumbers run a CPD course that may have reduced the numbers in our afternoon session but will be addressed for future joint events. Overall, this was a good initiative and we will be working with the Master Plumbers to carrying on this joint venture in 2017.

BACKFLOW INCIDENT

For two years we had constant problems with a water meter running backwards. An investigation of the site (a school) found it was a ring main and, when they were filling the pool, one meter used to go forward and the other back. The backwards spinning meter was unprotected during this time and so installation of an RPZ at the boundary not only stopped the water meter problem but also provided the network with adequate protection which was sadly lacking. We therefore had ongoing backflow there for at least two years.

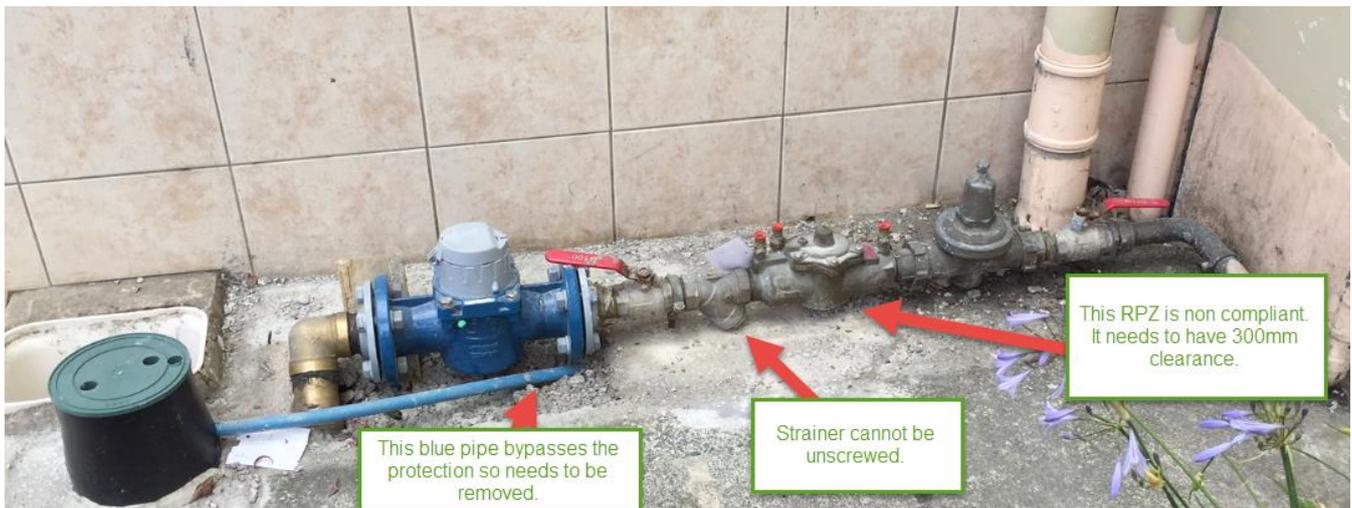


Cross Connection

This is an example of a regular cross connection we encounter and this one was on a Council backflow device. Their contractors had tapped into this to feed a nearby fountain. Words were had.

Bad Installs

This is one that we did not pick up on when we swapped out the meter (mainly as our contractors were not trained to look for it). I only spotted this six months later when I decided to do an audit test of the IQP's work. The IQP has been testing and passing it for three years and for strainer access, he simply isolated the device and loosened the strainer to turn it before re-positioning it facing down. The blue pipe was feeding a wash down area out the back and was unmetered. Again this was not spotted by our contractors during the meter replacement.

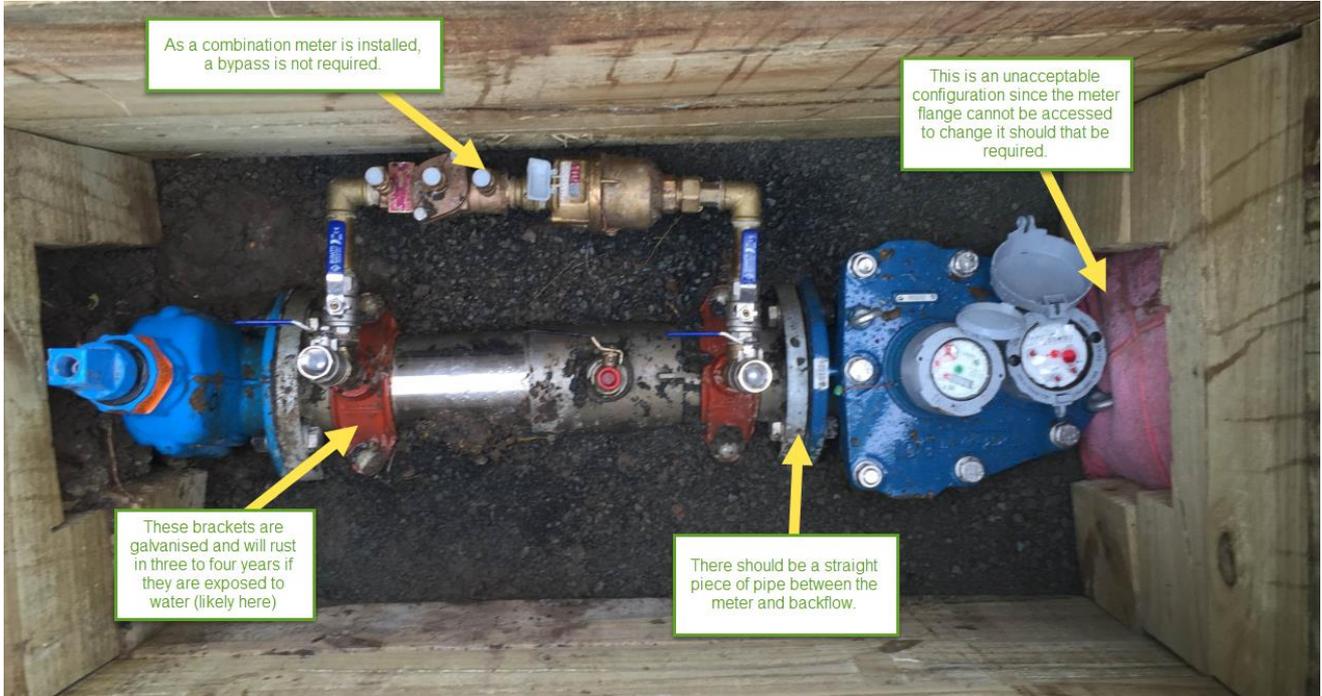


This blue pipe bypasses the protection so needs to be removed.

Strainer cannot be unscrewed.

This RPZ is non compliant. It needs to have 300mm clearance.

Even our own contractors are not immune to installing something incorrectly and this is a recent example of a bad installation. The strainer is installed but is in front of the meter and so completely inaccessible. A retraining programme is in place to ensure quality of work going forward.



UPCOMING WATER NEW ZEALAND EVENTS

For all upcoming events, check out the Water New Zealand website

www.waternz.org.nz



CALL FOR ABSTRACTS ARE NOW OPEN

Modelling and Digital Water Symposium, 15-16 March 2017, Auckland



Modelling Group
WATER NEW ZEALAND



Digital Water Group
WATER NEW ZEALAND

Stormwater Conference, 3-5 May 2017, Auckland

Stormwater 2017
Innovative. Resilient & Future Ready