



- ◆ Silty Water
- ◆ Treatment
- ◆ Recent Community Concerns

A WATERE WATER SUPPLY COUNCIL UPDATE

SILTY WATER

Recent floods severely affected the Birch Stream headworks—the intake of fresh water into the Awatere water pipelines.

Very silty water from large slips in the hills upstream of the intake cannot be fully filtered by the gravels overlaying the intake. A tributary spring-fed stream is normally used to provide much cleaner water in this situation but the floods moved stream channels and mixed the cleaner spring-fed water with the silty water.

Extensive river works have reshaped the two stream channels and the headworks are now working effectively, however such flooding will occur again with similarly silty water resulting around 3-5 times a year. The only way to eliminate this is to include filtration in the treatment process.



TREATMENT

In 2008 following several years of extensive research and consultation a proposal to fully treat the Awatere water supply was not proceeded with. Full treatment would involve filtration then chlorination. Significant Council and Central Government assistance was proposed but there was still extensive opposition from the community to the extra cost ratepayers would be required to fund.

Subsequently the MIOX treatment system was proposed and supported by the community. MIOX is a form of chlorination and is a fraction of the cost of full treatment that includes filtration.

MIOX inactivates bacteria when the water is clear but is ineffective when the water is silty. MIOX does not remove other dangerous organisms from the water - in particular there is a risk that protozoa (such as giardia and cryptosporidium) can be present, with nasty health effects. Because of this the permanent 'boil water' notice remains in place.



RECENT COMMUNITY CONCERNS

There has been a renewed concern from the community in recent months about drinking water quality, in particular silt levels, taste and skin irritations.

Recent skin irritation complaints are being investigated by the Medical Officer of Health and his team. Council has provided data to that team for their review. To date the water supply treatment process has been shown to meet all standards and chemical limits, and no link has been established between the water supply and skin problems. Council is continuing to work with the Public Health team to resolve the skin irritation issues.

The taste complaints in late June about the treated water at the public taps were due to water from Cloudy Bay Business Park (CBBP) being used to top up the tank that serves the taps while the UV plant was non-operational. This water has a higher than desirable level of manganese and while this does not have any health impacts, when it comes into contact with chlorine the reaction between the chlorine and the manganese will give off a nasty odour and create black particles in the water. Once Council was aware of this issue the tank and associated pipelines were emptied, flushed and refilled with Blenheim water. Water from CBBP will not be used again for top-ups of this tank.

Several submissions were made to the Annual Plan and the recent silty water problems have generated further pleas for a treatment solution to be found.

The Central Government Subsidy Scheme providing financial assistance to small communities with high 'deprivation' indices ceases early next year (2015). Seddon's high deprivation score could enable a significant subsidy to be approved. A large subsidy (\$2.24 million) was approved in 2007 but not taken up because of the opposition to the local funding required.

Council staff are reviewing the costings for treatment prepared for the 2008 proposals and will discuss possible subsidy levels with the Ministry of Health. Consideration will be given to separate Seddon Township treatment as well as full scheme treatment.

Later in the year we intend to consult with the Awatere community on the updated options and costs. The Medical Officer of Health will be involved in the planned discussions on possible future options with the community. Council will consider how much wider district support is justified.

A Long Term Plan is being developed which Council will consult on and then modify and adopt in June 2015. It is hoped that a proposal to treat Awatere or Seddon's water can be included.

However a lot of work, discussion and goodwill will be required first.

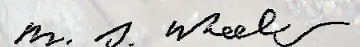
"There has been a renewed concern from the community in recent months about drinking water quality."



Alistair Sowman
Mayor



Clr Terry Sloan
Chair - Assets & Services



Mark Wheeler
Manager - Assets & Services