

Anna Kirk

From: Anna Kirk
Sent: Thursday, 2 February 2017 15:50
To: 'Fiona Fraser'
Subject: FW: CHLORINATION FAQs for website 2feb17

Some FAQs re chlorine you will find useful



CHLORINATION
FAQs for websit...

CHLORINATION FAQs

Why is it necessary to chlorinate the water?

Chlorine is a highly efficient disinfectant and helps kill harmful bacteria that may exist in the water or in the water supply pipes. It has been added as a precautionary measure to safe guard the water from potentially harmful bacteria and to ensure the water supply complies with the required drinking water standards.

Will chlorine affect my health?

Current studies indicate that using or drinking water with small amounts of chlorine does not cause harmful health effects. Its widespread use has been a major factor in reducing illness from waterborne diseases.

Even with the small volumes of chlorine used to some people will be able to taste it and some will notice the smell.

Please click on the link below regarding NZ drinking water standards -

- <http://www.health.govt.nz/publication/drinking-water-standards-new-zealand-2005-revised-2008>

Can chlorine affect existing conditions?

Yes, in a small number of people chlorine can be an irritant for an existing condition such as asthma or eczema. If you notice increased skin irritation, asthma symptoms or other symptoms – seek medical advice. You can contact Healthine 0800 611 116 or your family doctor (GP).

Other Sources

Ian Jarvis

From: Julia Dohmen
Sent: Friday, 18 August 2017 11:49
To: Maree Rohleder; Ian Jarvis
Subject: FW: Draft media release

From: Julia Dohmen
Sent: Friday, 7 July 2017 16:22
To: 'fiona.fraser@napier.govt.nz'
Cc: Nicholas Jones
Subject: FW: Draft media release

Hi Fiona,

Thanks for the opportunity to review.

Just a couple of things.

- Dr Jones has reviewed it - he thinks the intro may lead you into a hole in terms of community expectations if you say "a few more weeks". Maybe something along the lines of 'until further safety improvements are made to the network'. – see email below.
- Also our name – missing 'Health' – Hawke's Bay District Health Board.

Regards,
Julia

From: Julia Dohmen
Sent: Friday, 7 July 2017 16:10
To: Nicholas Jones
Subject: FW: Draft media release
Importance: High

From: Fiona Fraser [<mailto:fiona.fraser@napier.govt.nz>]
Sent: Friday, 7 July 2017 16:09
To: Julia Dohmen
Subject: Draft media release

Napier City Council will continue to chlorinate its city water supply until further safety improvements are made to the network.

A low level e.coli reading was returned to NCC on 23 May 2017, and although subsequent tests have all returned clear results, the decision has now been made to chlorinate for a longer period of time. Chlorination

has been in place for the last six weeks and is set to continue while Council progresses a raft of improvements to the network. The decision was reached in consultation with the Hawke's Bay District Health Board and the Drinking Water Assessor at a meeting this week.

NCC's Manager Asset Strategy Chris Dolley says that the campylobacter outbreak in Havelock North in 2016 and the subsequent inquiry has meant that local authorities New Zealand wide are more focused on water supply risks than previously. "We are also under a greater level of scrutiny than ever before," he says.

"What the Havelock North inquiry is showing us is that practices that were acceptable in the past may not be acceptable in the future. This could potentially see changes to the New Zealand Drinking Water Standard that are more aligned to the positions on drinking water held by other developed countries."

Mayor Bill Dalton says that while he understands that the move to continue chlorination is unlikely to be popular, it is necessary. "It's the right thing to do – and sometimes the right choice isn't the most popular one. Public health is our number one priority and although we recognise that a non-chlorinated supply would be preferable, it's important to understand that the bar has been raised somewhat when it comes to the sort of evidence and analysis required for untreated reticulated water. We will continue our discussions with the DHB and Public Health over the coming weeks and see where we end up."

Fiona Fraser

MANAGER COMMUNICATIONS AND MARKETING

Napier City Council, Private Bag 6010, Napier 4142

t +64 6 834 4144 / ext 8144 m +64 27 501 3921 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2005.

Ian Jarvis

From: Julia Dohmen
Sent: Friday, 18 August 2017 11:48
To: Maree Rohleder; Ian Jarvis
Subject: FW: For our feedback/review FW: Draft media release below... anything that sticks out, let me know!

Importance: High

From: Julia Dohmen
Sent: Wednesday, 26 July 2017 17:13
To: 'Fiona Fraser'
Subject: FW: For our feedback/review FW: Draft media release below... anything that sticks out, let me know!
Importance: High

Here is

From: Fiona Fraser [<mailto:fiona.fraser@napier.govt.nz>]
Sent: Wednesday, 26 July 2017 16:29
To: Julia Dohmen
Subject: Draft media release below... anything that sticks out, let me know!

"Safely first" as chlorination continues

Tuesday 26 July 2017

Napier's water will remain chlorinated for at least three more months.

At a meeting between Napier City Council and Hawke's Bay DHB and its drinking water assessors this week, timeframes for a possible end to a programme of chlorination, that has so far been in place for 10 weeks, were closely examined.

It was agreed that chlorination should continue, particularly since the DWAs have revoked Napier City Council's secure bore status.

"Secure bore status means that the bores are protected from any possible contamination," explains Chief Executive Wayne Jack. "The Havelock North water enquiry has thrown a spotlight on water infrastructure across the country and, in essence, the goal posts have shifted. Practices and infrastructure that were once considered acceptable are now being reassessed and new best practice is being developed. We are fully committed to improving and maintaining our drinking water network to the best possible standard, with the aim of meeting all the requirements of the Drinking Water Standards by November."

With bore heads on the 10 bores across Napier below ground, modifications to the bore chambers will be implemented in order to mitigate the risk of any pooling of water – which can be a potential source of bacterial contamination. Longer term, NCC will lift all bore heads above ground.

Testing points are also in the process of being upgraded, to ensure that when water is taken for laboratory analysis, it is drawn from a secure point in the network and cannot be tainted during the sampling process.

Mr Jack says that although routine rates-funded maintenance has been in place for decades, the infrastructure is simply “not up to scratch” when evaluated against stricter compliance measures. “This Council - as well as previous Councils – have maintained the network to the best of their knowledge and without incurring unrealistic costs for Napier ratepayers to foot. However, once we brought on new staff during our recent realignment – staff with very good specialised, international knowledge - it became clear to us all that a gap analysis and updated Water Safety Plan were required. The gap analysis on our bores, in particular, identified some issues with the infrastructure that we shared with the DHB and Drinking Water Assessor. Although we’d already planned to progress maintenance in these areas, clearly we’re now escalating the timings on these updates. We began our works programme two months ago and it should take a further three to four months to finish it.”

Mayor Bill Dalton says that although he is disheartened that chlorination is continuing, it’s “the right thing to do.”

“It’s a bit like the spotlight that is on buildings since the earthquakes in Canterbury. What we once took for granted as strong and sound and able to withstand a large quake has been reassessed and we’re now looking at buildings in very different way. The same goes for water. Five thousand people fell ill in Havelock North and some residents died – as a result we know more and we tolerate far less risk. It is completely understandable that the effects of the crisis will impact how we look at our water infrastructure and our behaviour in the future. And rightly so. We have work to do - we accept that, and we’re getting on with it.”

An independent assessment of all water network improvements will take place before secure bore status is restored, says Mr Jack. “We’re hoping to identify an assessor who can work with us as we move through the improvement programme, and feed back to us in real time, to speed things up as much as possible.”

Details of Council’s water improvements are found in the Water Safety Plan here ([LINK](#)). The cost of network enhancements will be covered by the 4.9% rates increase adopted by Council, and by the usual maintenance and capital programme budget.

Mr Jack says additional information on progress with water network improvements, including Q&As with key staff, video content and a Facebook live chat, will be rolled out over coming weeks.

Fiona Fraser
MANAGER COMMUNICATIONS AND MARKETING
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 834 4144 / ext 8144 m +64 27 501 3921 www.napier.govt.nz



Ian Jarvis

From: Chris Dolley <chris.dolley@napier.govt.nz>
Sent: Wednesday, 24 May 2017 12:38
To: Wayne Jack; Jon Kingsford; Fiona Fraser; Lance Titter; Cameron Ormsby; Matt Molloy
Cc: Santha Agas; Lance Groves; Fiona Bruins; Simon McCarthy
Subject: Napier Water Supply Chlorination Update

Here is an update on the Chlorination of Napier Water Supply.

This information is being supplied to NCC and HBDHB and is not intended for release to the public in any form. All messaging/communication to the public or media are to be managed through Fiona Fraser, Manager Communications

1. Taradale Reservoir is currently isolated and being hand dosed to an operating chlorine residual. When it is at the required level the reservoir will be brought online- it is estimated that this will occur this afternoon
2. Chlorination equipment has been sourced to chlorinate at each bore site. Initially T2, T5, T6 and T7 will be equipped which are our four largest bores. T2 has been equipped and will be brought online as a chlorinated supply just after lunchtime today.
3. Unfortunately the chlorination equipment requires specialised hose- we consumed all hose stock equipping T2, New hose is being flown in from Auckland and is scheduled to arrive at 4:30pm this afternoon
4. The current plan is to continue to equip T5, T6 and T7 this evening and tonight and progressively bring these bores online
5. It should be noted that due to location of some bores being in the footpath that these footpaths will be closed for the period of chlorination- this may create complaints/concern from neighbours etc
6. Additional chlorination equipment has been ordered to equip T1, T4 and Coverdale bore, however a technical assessment is required to see if equipping these bores is possible. This technical assessment will occur tomorrow.
7. The area known as Otatara and Puketapu parts of the Napier Water Supply scheme can not be chlorinated due to technical chlorination issues. A rough estimate is that this is less than 1% of the supply population. Note: do not confuse this with the town of Puketapu which is not supplied from the scheme- we are preparing a diagram showing the extent of this zone. This diagram will be available late today at the earliest.
8. The scheme will be manually operated (remotely by a person) for a period of time- initially several days to ensure we have good control over the scheme. We are not currently sure if control can be automated as per normal supply.
9. Resources from H&S have been supplied to document to SOP for the temporary chlorination, given new operation and risks associated with chlorine.
10. The sample point where the transgression occurred is scheduled to be shifted to a new appropriate location this afternoon
11. The chlorine free tap will be investigated this afternoon and scheduled to be available late tomorrow- This will be supplied by T3 which also supplies the Otatara/ Puketapu Zone, this bore will be sampled/tested on a daily basis for the duration of chlorination.

Any questions please ask away...

Chris

Chris Dolley
MANAGER ASSET STRATEGY
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz



NAPIER
CITY COUNCIL
Te Kōwhiri o Ahuriri

toasted! | 8 July 2017
Tickets on sale now!
fawc.co.nz | **WINTER!**
SAVILE'S BAY
F.A.W.C!
JUNE 9th - 9th JULY 2017

This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Please to the Electronic Transactions Act 2002.

Ian Jarvis

From: Chris Dolley <chris.dolley@napier.govt.nz>
Sent: Thursday, 25 May 2017 16:57
To: Wayne Jack; Jon Kingsford; Fiona Fraser; Lance Titter; Cameron Ormsby; Matt Molloy
Cc: Santha Agas; Lance Groves; Fiona Bruins; Simon McCarthy; Dean Hammond
Subject: Napier Water Supply Chlorination Update 25 May

Hi All,

Update of today's activities.

This information is being supplied to NCC and HBDHB and is not intended for release to the public in any form. All messaging/communication to the public or media are to be managed through Fiona Fraser, Manager Communications

Achieved:

1. Test results back for Tamatea West- negative
2. T5 and T7 chlorination installed and commissioned into scheme
3. Taradale Reservoir chlorinated brought online as of this morning
4. New Tamtea West sample point installed
5. Diagram of Napier testing points completed
6. Otatara/Puketapu Zone isolated- 90% fill isolation 100% will cause T3 to cut out on delivery pressure fail
7. Scheme operating well with 4 bores- 1 burst in Otatara/Puketapu Zone due to increased operating pressure
8. Agreed with PGA to host chlorinated free tap
9. Determined testing plan and engaged with Water testing Hawkes Bay for testing proposal

Tomorrows Plan

- | | |
|--|-----|
| 1. Contact PGA to agree on site plan | SA |
| 2. Schematic and map and testing regime to | DWA |
| 3. Take DWA (Cameron) on field inspection | SA |
| 4. Monitor FAC and dosing requirements | SA |
| 5. Monitor Scheme Operations | LG |
| 6. Map of Otatra Zone for Comms | LG |
| 7. Prepare scoring Plan | LG |
| 8. Assess resourcing plan for testing and issue PO | SA |
| 9. Communicate testing plan for weekend | SA |
| 10. Plan for resources to maintain chlorinators | DH |
| 11. Commence distribution trailer for chorine | DH |

Any Questions just ask

Chris Dolley

MANAGER ASSET STRATEGY

Napier City Council, Private Bag 6010, Napier 4142

t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you for to the Electronic Transactions Act 2002.

From: Chris Dolley

Sent: Wednesday, 24 May 2017 5:09 PM

To: Wayne Jack <waynej@napier.govt.nz>; Jon Kingsford <jon.kingsford@napier.govt.nz>; Fiona Fraser <fiona.fraser@napier.govt.nz>; Lance Titter <Lancet@napier.govt.nz>; 'Cameron.Ormsby@hawkesbaydhb.govt.nz' <Cameron.Ormsby@hawkesbaydhb.govt.nz>; 'matt.molloy@hawkesbaydhb.govt.nz' <matt.molloy@hawkesbaydhb.govt.nz>

Cc: Santha Agas <santha.agas@napier.govt.nz>; Lance Groves <lance.groves@napier.govt.nz>; Fiona Bruins <fiona.bruins@napier.govt.nz>; Simon McCarthy <simon.mccarthy@napier.govt.nz>; Dean Hammond <Deanh@napier.govt.nz>

Subject: RE: Napier Water Supply Chlorination Update

Hi All

Update after reviews of today's activities

This information is being supplied to NCC and HBDHB and is not intended for release to the public in any form. All messaging/communication to the public or media are to be managed through Fiona Fraser, Manager Communications

Achieved:

1. Test results back for Tamatea West- negative result
2. T2- chlorinator installed commissioned and now operating
 - T7- Electrical install complete
 - T6- electrical install complete- chlorinator currently being installed with equipment arriving from Auckland
 - T5- Electrical install complete
3. Taradale Reservoir has been hand dosed with liquid chlorine however additional mixing is required prior to release into scheme- there is 9000m3 in this reservoir
4. FAC in Tamatea of 0.04- ie chlorinated water is flowing through the system
5. Confirmed location of new Tamatea West testing point
6. Commenced diagram of Napier testing points
7. Isolation plan for Otatara/Puketapu Zone complete
8. Scheme operating well with minimal bores operating
9. Documented H&S to develop SOP's

Tomorrows Plan

1. T5 and T7 Install chlorinator equipment
2. Install Chlorine Free Tap and advise Comms of exact location etc
3. Install new test point for Tamatea West
4. Document sampling regime for compliance and FAC- copy to DWA
5. Complete diagram of sample points- copy to DWA
6. Resourcing Plan for sampling
7. Isolate Otartara/ Puketapu Zone as per plan and provide Map to comms for community
8. Install new sample tap on Taradale Res Outlet
9. Monitor Scheme
10. Develop scour plan to accelerate spread of chlorinated water
11. Commence measles map of coliform results over last 5 years

Many Thanks to the whole team for a great effort

Next Update tomorrow lunch approx.

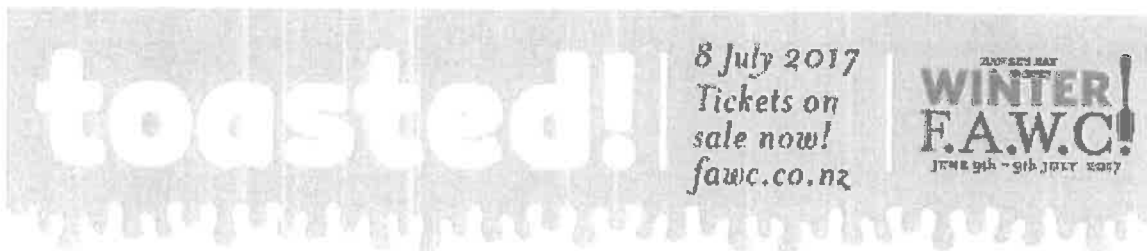
Chris

Chris Dolley

MANAGER ASSET STRATEGY

Napier City Council, Private Bag 6010, Napier 4142

t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz



If you are unable to view any attachments, is not intended for release to the public in any form. All messaging/communication to the public or media are to be managed through Fiona Fraser, Manager Communications

From: Chris Dolley

Sent: Wednesday, 24 May 2017 12:38 PM

To: Wayne Jack <waynej@napier.govt.nz>; Jon Kingsford <jon.kingsford@napier.govt.nz>; Fiona Fraser <fiona.fraser@napier.govt.nz>; Lance Titter <Lancet@napier.govt.nz>; 'Cameron.Ormsby@hawkesbaydhb.govt.nz' <Cameron.Ormsby@hawkesbaydhb.govt.nz>; 'matt.molloy@hawkesbaydhb.govt.nz' <matt.molloy@hawkesbaydhb.govt.nz>

Cc: Santha Agas <santha.agas@napier.govt.nz>; Lance Groves <lance.groves@napier.govt.nz>; Fiona Bruins <fiona.bruins@napier.govt.nz>; Simon McCarthy <simon.mccarthy@napier.govt.nz>

Subject: Napier Water Supply Chlorination Update

Here is an update on the Chlorination of Napier Water Supply.

This information is being supplied to NCC and HBDHB and is not intended for release to the public in any form. All messaging/communication to the public or media are to be managed through Fiona Fraser, Manager Communications

1. Taradale Reservoir is currently isolated and being hand dosed to an operating chlorine residual. When it is at the required level the reservoir will be brought online- it is estimated that this will occur this afternoon
2. Chlorination equipment has been sourced to chlorinate at each bore site. Initially T2, T5, T6 and T7 will be equipped which are our four largest bores. T2 has been equipped and will be brought online as a chlorinated supply just after lunchtime today.
3. Unfortunately the chlorination equipment requires specialised hose- we consumed all hose stock equipping T2, New hose is being flown in from Auckland and is scheduled to arrive at 4:30pm this afternoon
4. The current plan is to continue to equip T5, T6 and T7 this evening and tonight and progressively bring these bores online
5. It should be noted that due to location of some bores being in the footpath that these footpaths will be closed for the period of chlorination- this may create complaints/concern from neighbours etc
6. Additional chlorination equipment has been ordered to equip T1, T4 and Coverdale bore, however a technical assessment is required to see if equipping these bores is possible. This technical assessment will occur tomorrow.
7. The area known as Otatara and Puketapu parts of the Napier Water Supply scheme can not be chlorinated due to technical chlorination issues. A rough estimate is that this is less than 1% of the supply population. Note: do not confuse this with the town of Puketapu which is not supplied from the scheme- we are preparing a diagram showing the extent of this zone. This diagram will be available late today at the earliest.
8. The scheme will be manually operated (remotely by a person) for a period of time- initially several days to ensure we have good control over the scheme. We are not currently sure if control can be automated as per normal supply.
9. Resources from H&S have been supplied to document to SOP for the temporary chlorination, given new operation and risks associated with chlorine.
10. The sample point where the transgression occurred is scheduled to be shifted to a new appropriate location this afternoon
11. The chlorine free tap will be investigated this afternoon and scheduled to be available late tomorrow- This will be supplied by T3 which also supplies the Otatara/ Puketapu Zone, this bore will be sampled/tested on a daily basis for the duration of chlorination.

Any questions please ask away...

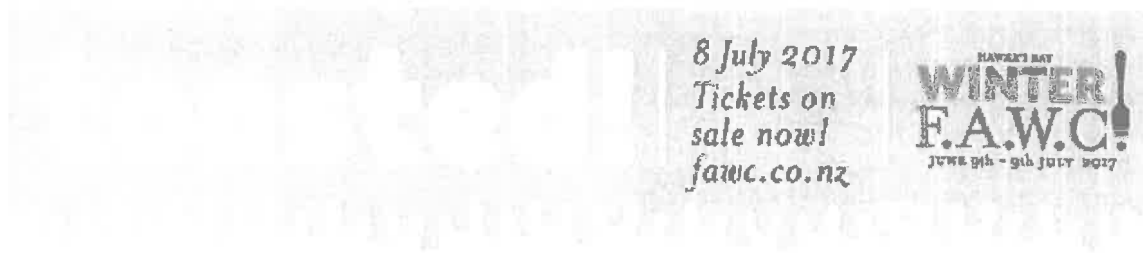
Chris

Chris Dolley

MANAGER ASSET STRATEGY

Napier City Council, Private Bag 6010, Napier 4142

† +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz



Ian Jarvis

From: Chris Dolley <chris.dolley@napier.govt.nz>
Sent: Wednesday, 24 May 2017 17:09
To: Wayne Jack; Jon Kingsford; Fiona Fraser; Lance Titter; Cameron Ormsby; Matt Molloy
Cc: Santha Agas; Lance Groves; Fiona Bruins; Simon McCarthy; Dean Hammond
Subject: RE: Napier Water Supply Chlorination Update

Hi All

Update after reviews of today's activities

This information is being supplied to NCC and HBDHB and is not intended for release to the public in any form. All messaging/communication to the public or media are to be managed through Fiona Fraser, Manager Communications

Achieved:

1. Test results back for Tamatea West- negative result
2. T2- chlorinator installed commissioned and now operating
 - T7- Electrical install complete
 - T6- electrical install complete- chlorinator currently being installed with equipment arriving from Auckland
 - T5- Electrical install complete
3. Taradale Reservoir has been hand dosed with liquid chlorine however additional mixing is required prior to release into scheme- there is 9000m3 in this reservoir
4. FAC in Tamatea of 0.04- ie chlorinated water is flowing through the system
5. Confirmed location of new Tamatea West testing point
6. Commenced diagram of Napier testing points
7. Isolation plan for Otatara/Puketapu Zone complete
8. Scheme operating well with minimal bores operating
9. Documented H&S to develop SOP's

Tomorrows Plan

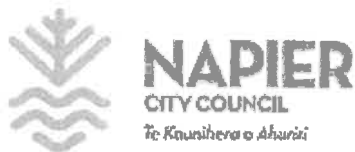
1. T5 and T7 Install chlorinator equipment
2. Install Chlorine Free Tap and advise Comms of exact location etc
3. Install new test point for Tamatea West
4. Document sampling regime for compliance and FAC- copy to DWA
5. Complete diagram of sample points- copy to DWA
6. Resourcing Plan for sampling
7. Isolate Otartara/ Puketapu Zone as per plan and provide Map to comms for community
8. Install new sample tap on Taradale Res Outlet
9. Monitor Scheme
10. Develop scour plan to accelerate spread of chlorinated water
11. Commence meale map of coliform results over last 5 years

Many Thanks to the whole team for a great effort

Next Update tomorrow lunch approx.

Chris

Chris Dolley
MANAGER ASSET STRATEGY
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Communications Act 2002.

From: Chris Dolley
Sent: Wednesday, 24 May 2017 12:38 PM
To: Wayne Jack <waynej@napier.govt.nz>; Jon Kingsford <jon.kingsford@napier.govt.nz>; Fiona Fraser <fiona.fraser@napier.govt.nz>; Lance Titter <Lancet@napier.govt.nz>; 'Cameron.Ormsby@hawkesbaydhb.govt.nz' <Cameron.Ormsby@hawkesbaydhb.govt.nz>; 'matt.molloy@hawkesbaydhb.govt.nz' <matt.molloy@hawkesbaydhb.govt.nz>
Cc: Santha Agas <santha.agas@napier.govt.nz>; Lance Groves <lance.groves@napier.govt.nz>; Fiona Bruins <fiona.bruins@napier.govt.nz>; Simon McCarthy <simon.mccarthy@napier.govt.nz>
Subject: Napier Water Supply Chlorination Update

Here is an update on the Chlorination of Napier Water Supply.

This information is being supplied to NCC and HBDHB and is not intended for release to the public in any form. All messaging/communication to the public or media are to be managed through Fiona Fraser, Manager Communications

1. Taradale Reservoir is currently isolated and being hand dosed to an operating chlorine residual. When it is at the required level the reservoir will be brought online- it is estimated that this will occur this afternoon
2. Chlorination equipment has been sourced to chlorinate at each bore site. Initially T2, T5, T6 and T7 will be equipped which are our four largest bores. T2 has been equipped and will be brought online as a chlorinated supply just after lunchtime today.
3. Unfortunately the chlorination equipment requires specialised hose- we consumed all hose stock equipping T2, New hose is being flown in from Auckland and is scheduled to arrive at 4:30pm this afternoon
4. The current plan is to continue to equip T5, T6 and T7 this evening and tonight and progressively bring these bores online
5. It should be noted that due to location of some bores being in the footpath that these footpaths will be closed for the period of chlorination- this may create complaints/concern from neighbours etc
6. Additional chlorination equipment has been ordered to equip T1, T4 and Coverdale bore, however a technical assessment is required to see if equipping these bores is possible. This technical assessment will occur tomorrow.
7. The area known as Otatara and Puketapu parts of the Napier Water Supply scheme can not be chlorinated due to technical chlorination issues. A rough estimate is that this is less than 1% of the supply population.

Note: do not confuse this with the town of Puketapu which is not supplied from the scheme- we are preparing a diagram showing the extent of this zone. This diagram will be available late today at the earliest.

8. The scheme will be manually operated (remotely by a person) for a period of time- initially several days to ensure we have good control over the scheme. We are not currently sure if control can be automated as per normal supply.
9. Resources from H&S have been supplied to document to SOP for the temporary chlorination, given new operation and risks associated with chlorine.
10. The sample point where the transgression occurred is scheduled to be shifted to a new appropriate location this afternoon
11. The chlorine free tap will be investigated this afternoon and scheduled to be available late tomorrow- This will be supplied by T3 which also supplies the Otataru/ Puketapu Zone, this bore will be sampled/tested on a daily basis for the duration of chlorination.

Any questions please ask away...

Chris

Chris Dolley

MANAGER ASSET STRATEGY

Napier City Council, Private Bag 6010, Napier 4142

t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz



NAPIER
CITY COUNCIL
Te Kōwhiri o Akehiwi



This document may include information that is confidential. If you are not the intended recipient, please do not disseminate it. If you have received this document in error, please contact the sender.

Taraclale
Reservoir
Transgression

2313 12017

Ian Jarvis

From: Matt Molloy <mattm@ehconsulting.co.nz>
Sent: Tuesday, 18 April 2017 10:19
To: Matt Molloy
Subject: Fw: Positive E-Coli test Taradale Reservoir

From: Peter Wood
Sent: Thursday, March 23, 2017 3:43 PM
To: Cameron Ormsby ; 'Theresa Te Whaiti' ; Matt Molloy ; Maree Rohleder Hawkes bay
Subject: FW: Positive E-Coli test Taradale Reservoir

Copy FYI and the file.

Regards,

Peter Wood
Health Protection Officer/Drinking Water Assessor, Public Health Services
MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442
Ph (06) 350 9110 | Fax: (06) 350 9111
Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

From: Chris Dolley [mailto:chris.dolley@napier.govt.nz]
Sent: Thursday, 23 March 2017 3:39 p.m.
To: Peter Wood
Cc: Nicholas Jones; Wayne Jack; Fiona Fraser; Jon Kingsford; Lance Titter; Santha Agas; Jason Strong
Subject: Positive E-Coli test Taradale Reservoir

Hi Peter,

As per our phone discussion at 2pm 23/3/17 here is an email outlining the situation in Napier.

We have received a positive indicator test for e-Coli at the Taradale Reservoir.
The test location was on the inlet to the Taradale reservoir. All other tests taken yesterday were clear.

We have retested for the enumeration result- that will be available tomorrow late morning.
We are also retesting- all source bores, a range sample points in the retic and trunk main on the way to the reservoir and a range of sample points on the outlet of the reservoir to allow us to assess the extent or not of the contamination.

We have physically checked all bore headworks to ensure that they are in serviceable condition- all are in good condition.

We have considered searching for possible leaks in the trunkmain/ boremain on the inlet side of Taradale reservoir however the wet weather means that this activity is not possible.

We immediately isolated the Taradale Reservoir and are holding this reservoir offline until the comprehensive test results are available. As Taradale reservoir is currently holding around 11,000m³ of water we are not chlorinating this site until we receive results tomorrow.

As discussed with yourself there is no discernible illness trends in Taradale or Napier so a full boil water alert is not warranted at this stage.

So as agreed we are waiting for the results of today's testing prior to any major response.

We are preparing for a worst case outcome by putting a plan together to isolate the trunk main from the borefield to Taradale Reservoir and use the reservoir as a chlorination site for the Napier Water Supply should this be required. We are also ensuring that sufficient chlorine and other equipment is available to allow for full chlorination should it be required.

Should you have queries or come new information becomes available please do not hesitate to call

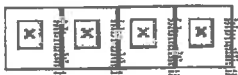
Chris Dolley
MANAGER ASSET STRATEGY
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalssoftware.com



Ian Jarvis

From: Peter Wood <Peter.Wood@midcentraldhb.govt.nz>
Sent: Tuesday, 28 March 2017 08:24
To: 'Jon Kingsford'
Cc: Nicholas Jones; Wayne Jack; Fiona Fraser; Lance Titter; Santha Agas; Jason Strong; Chris Dolley; Maree Rohleder; Matt Molloy
Subject: RE: Positive E-Coli test Taradale Reservoir

Thanks Jon,

I would like to get copies of the formal results when they arrive, and confirm sampling locations so I can understand fully the spread of samples. We would also expect a report on the transgression investigation to be sent to the Hawkes Bay Public Health Service.

Regards,

Peter Wood
Health Protection Officer/Drinking Water Assessor, Public Health Services
MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442
Ph (06) 350 9110 | Fax: (06) 350 9111
Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

From: Jon Kingsford [mailto:jon.kingsford@napier.govt.nz]
Sent: Sunday, 26 March 2017 11:38 a.m.
To: Peter Wood
Cc: Nicholas Jones; Wayne Jack; Fiona Fraser; Lance Titter; Santha Agas; Jason Strong; Chris Dolley
Subject: Re: Positive E-Coli test Taradale Reservoir

Hi Peter,

All samples (25 - same locations) taken on Saturday have returned a negative result.

These results give Council 3 days of negative test results in relation to the original incident.

We will make contact on Monday to discuss and agree on Council's proposed next steps.

Regards

Jon

Sent from my iPhone

On 25/03/2017, at 1:49 PM, Jon Kingsford <jon.kingsford@napier.govt.nz> wrote:

Hi Peter,

All samples (25 - same locations) taken on Friday have returned a negative result.

We will inform you of test results of samples taken today when the results become available.

Regards

Jon

Sent from my iPhone

On 24/03/2017, at 1:33 PM, Chris Dolley <chris.dolley@napier.govt.nz> wrote:

Hi Peter,

As discussed on the phone around 12:30 today here is the current situation:

All tests sampled yesterday (25) came back negative.

This included all operational source bores, sample point, Taradale reservoir dip samples and retic samples.

As discussed there was no noticeable/visual issues with the taradale reservoir

Taradale reservoir will remain isolated offline until Monday. This has no impact on customers and this decision is based on operational convenience.

As agreed- we will continue the wide ranging testing regime until 3 clear results are received.

It is noted that we still needed to send through the last 2 weeks of samples as discussed yesterday

We will advise of any issues should they arise over the weekend.

Regards,

Chris

Chris Dolley
MANAGER ASSET STRATEGY
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz





This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

From: Chris Dolley

Sent: Thursday, 23 March 2017 3:39 p.m.

To: 'Peter Wood' <Peter.Wood@midcentraldhb.govt.nz>

Cc: Nicholas Jones <Nicholas.Jones@hawkesbaydhb.govt.nz>; Wayne Jack <waynej@napier.govt.nz>; Fiona Fraser <fiona.fraser@napier.govt.nz>; Jon Kingsford <jon.kingsford@napier.govt.nz>; Lance Titter <Lancet@napier.govt.nz>; Santha Agas <santha.agas@napier.govt.nz>; Jason Strong <jason.strong@napier.govt.nz>

Subject: Positive E-Coli test Taradale Reservoir

Hi Peter,

As per our phone discussion at 2pm 23/3/17 here is an email outlining the situation in Napier.

We have received a positive indicator test for e-Coli at the Taradale Reservoir. The test location was on the inlet to the Taradale reservoir. All other tests taken yesterday were clear.

We have retested for the enumeration result- that will be available tomorrow late morning.

We are also retesting- all source bores, a range sample points in the retic and trunk main on the way to the reservoir and a range of sample points on the outlet of the reservoir to allow us to assess the extent or not of the contamination.

We have physically checked all bore headworks to ensure that they are in serviceable condition- all are in good condition.

We have considered searching for possible leaks in the trunkmain/ bore mains on the inlet side of Taradale reservoir however the wet weather means that this activity is not possible.

We immediately isolated the Taradale Reservoir and are holding this reservoir offline until the comprehensive test results are available. As Taradale reservoir is currently holding around 11,000m³ of water we are not chlorinating this site until we receive results tomorrow.

As discussed with yourself there is no discernible illness trends in Taradale or Napier so a full boil water alert is not warranted at this stage.

So as agreed we are waiting for the results of today's testing prior to any major response.

We are preparing for a worst case outcome by putting a plan together to isolate the trunk main from the borefield to Taradale Reservoir and use the reservoir as a chlorination site for the Napier Water Supply should this be required. We are also ensuring that sufficient chlorine and other equipment is available to allow for full chlorination should it be required.

Should you have queries or come new information becomes available please do not hesitate to call

Chris Dolley
MANAGER ASSET STRATEGY
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalssoftware.com



Ian Jarvis

From: Matt Molloy
Sent: Thursday, 11 May 2017 16:40
To: 'Fiona Bruins'; Malcolm McGregor
Cc: Santha Agas; Maree Rohleder; peter.wood@midcentraldhb.govt.nz; Cameron Ormsby; Chris Dolley
Subject: RE: Taradale & Halliwell reservoir reports

Hi Fiona, We have had time to review the transgression reports for Taradale and Halliwell reservoirs and apologise for the delay in responding.

While I acknowledge that I suggested to use the Enfield reservoir transgression report as a guide, we feel that more detail is required in the reports, such as;

-is the sample tap sanitary, has there been any work on the reticulation in the area, is there any reason to suspect inadequate training for sampling officers, when was the reservoir last cleaned and inspected, is there a backflow risk from private residences.

-reports mention that checks of the reservoirs and bores were carried out but nothing found, this could be expanded on to include what was actually checked, maybe even a copy of the inspection checklist/notes.

-What does NCC think was the source of the transgression?

-What will NCC do to reduce the likelihood of it happening again (eg. Things like regular checks and inspections, extra monitoring samples, setting up chlorine injection points, consideration of chlorination of the supply).

Halliwell reservoir results sent through only show 2 clear tests for the reservoir after chlorination and flushing (6 & 7 April 2017), DWSNZ states 3 clear tests must be provided and the NCC WSP refers to the response procedures in the DWSNZ. Some of the communication issues around this have been discussed with Chris Dolley and Santha Agas (on April 19th) to ensure that things like this do not reoccur. Making sure there is written agreement between the NCC and the DWA on what is agreed is particularly important.

We also felt that it would be appropriate for a senior level water/asset manager to also sign off the reports as most of the actions undertaken and correspondence was done through the water team.

NCC may wish to contact its counterparts in Hastings District Council to see what they do for transgression reports.

We would be pleased to receive updated reports at your earliest convenience.

Kind regards

Matt

Matt Molloy
Drinking Water Assessor
Central North Island Drinking Water Assessment Unit –Napier
022 4444 662

From: Fiona Bruins [mailto:fiona.bruins@napier.govt.nz]
Sent: Monday, 24 April 2017 16:36
To: Malcolm McGregor
Cc: Santha Agas; Matt Molloy; Maree Rohleder; peter.wood@midcentraldhb.govt.nz
Subject: Taradale & Halliwell reservoir reports

Good afternoon Malcolm,

Attached are our reports from the Taradale Reservoir and Halliwell Reservoir positive E.coli result incidents, along with the associated test results.

Kind regards,
Fiona

Fiona Bruins
ENVIRONMENTAL MANAGEMENT OFFICER
Napier City Council, Private Bag 6010, Napier 4142
f +64 6 836 5618 / ext 8618 m +64 27 403 3918 www.napier.govt.nz



This communication, including any attachments, is confidential if you are not the intended recipient. Please delete if this has been referred to the Electronic Transactions Act 2002.

Hallwell
Reservoir
Transgression
31/3/2017

Ian Jarvis

From: Matt Molloy <mattm@ehconsulting.co.nz>
Sent: Monday, 17 April 2017 19:06
To: Matt Molloy
Subject: Fw: Halliwell Tank Water Quality Incident- Update

-----Original Message-----

From: Peter Wood
Sent: Thursday, April 13, 2017 9:20 AM
To: 'Chris Dolley'
Cc: Santha Agas ; Matt Molloy
Subject: RE: Halliwell Tank Water Quality Incident- Update

Hello Chris,

Thank you for this report. I have copied Matt Molloy into this email. He will be in Napier next week while I am on leave.

Regards,

Peter Wood
Health Protection Officer/Drinking Water Assessor, Public Health Services MidCentral Health | Private Bag 11036,
Ruahine Street, Palmerston North 4442 Ph (06) 350 9110 | Fax: (06) 350 9111
Email: peter.wood@midcentralthb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

-----Original Message-----

From: Chris Dolley [mailto:chris.dolley@napier.govt.nz]
Sent: Thursday, 13 April 2017 8:42 a.m.
To: Peter Wood
Cc: Santha Agas
Subject: RE: Halliwell Tank Water Quality Incident- Update

Hi Peter,

Just the latest on Halliwell Tank.

Halliwell tank remained off line longer than planned due to our response to XTC Debbie which was a major operation for our field staff.

We have undertaken daily testing on Halliwell Tank.

We received 3 clear tests

Halliwell was brought back into the scheme on Tuesday 11 April

Chris

Chris Dolley
MANAGER ASSET STRATEGY

The Big Easy - Ride the Hawke's Bay Trails Saturday April 15, 2017 www.thebigeasy.co.nz

This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

-----Original Message-----

From: Peter Wood [mailto:Peter.Wood@midcentraldhb.govt.nz]
Sent: Wednesday, 12 April 2017 10:33 AM
To: Chris Dolley <chris.dolley@napier.govt.nz>
Cc: Matt Molloy <mattm@ehconsulting.co.nz>
Subject: RE: Halliwell Tank Water Quality Incident- Update

Hello Chris,

I am down in Wellington this week, and have leave booked from next week. I won't be able to make it over to review the Napier/Taradale supply until mid-May 2017. As a result I am providing Matt Molloy with some advice on the key issues and information I am interested in. matt will be in Napier next week.

regards,

Peter.

From: Chris Dolley [chris.dolley@napier.govt.nz]
Sent: 03 April 2017 14:01
To: Peter Wood
Cc: Santha Agas
Subject: Halliwell Tank Water Quality Incident- Update

Hi Peter,

Just an update on where we are at.

- * The 6 retic samples taken yesterday came back clear.
- * Halliwell Reservoir has now been chlorinated and cleaned. We are taking the opportunity to undertake some maintenance to the internal ladder
- * We plan to refill the reservoir from tomorrow and commence daily testing, once we receive 3 clear tests we intend on returning to service
- * The contingency operation is running well with no issues.

Regards,

Chris

Chris Dolley

MANAGER ASSET STRATEGY

Napier City Council, Private Bag 6010, Napier 4142

t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz<<http://www.napier.govt.nz>>

[Napier City Council - Te Kaunihera o Ahuriri]<<http://www.napier.govt.nz/>>

This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

#####

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege.

If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments.

If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments.

MidCentral District Health Board does not accept any liability in respect of any virus which is not detected.

This e-mail message has been scanned and cleared by MailMarshal

#####

#####

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege.

If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments.

If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments.

MidCentral District Health Board does not accept any liability in respect of any virus which is not detected.

This e-mail message has been scanned and cleared by MailMarshal

#####

Ian Jarvis

From: Matt Molloy <mattm@ehconsulting.co.nz>
Sent: Tuesday, 18 April 2017 10:18
To: Matt Molloy
Subject: Fw: Napier Water Supply- Halliwell Tank- E-coli Incident

From: Maree Rohleder
Sent: Friday, March 31, 2017 4:21 PM
To: Cameron Ormsby ; Malcolm McGregor ; Theresa Te Whaiti ; 'Matt Molloy'
Subject: FW: Napier Water Supply- Halliwell Tank- E-coli Incident

From: Peter Wood [mailto:Peter.Wood@midcentraldhb.govt.nz]
Sent: Friday, 31 March 2017 15:52
To: 'Chris Dolley'
Cc: Nicholas Jones; Maree Rohleder
Subject: RE: Napier Water Supply- Halliwell Tank- E-coli Incident

Hello Chris,

Thank you for outlining the remedial action for this event. The aim of remedial action is either to ensure that the water supplied to this area meets the DWSNZ, or that people can take action to protect themselves. Based on our conversations and other sample results this plan is a practicable way of achieving the first of these objective.

I will be interested in the results from the samples collected today. I am available on my cell phone over the weekend.

I am available Monday and Tuesday next week, and it would be very helpful to gain a better understanding of the Taradale and Napier supply. I also have a few questions regarding the Water Safety Plan, and the utility of using the plan in a real event. I have referred to the WSP for the last two transgressions and struggled with the application of the contingency actions. I would like to discuss the WSP during my visit. I am interested in whether the time frame for preparation of the contingency plans can be brought forward. I am also interested in the reasoning behind the reference to 500 properties on page 26 – it does not appear practical or sensible if there is a public health risk or contaminated water.

I look forward to catching up with the team.

Regards,

Peter Wood
Health Protection Officer/Drinking Water Assessor, Public Health Services
MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442
Ph (06) 350 9110 | Fax: (06) 350 9111
Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

From: Chris Dolley [mailto:chris.dolley@napier.govt.nz]
Sent: Friday, 31 March 2017 3:19 p.m.
To: Peter Wood
Subject: Napier Water Supply- Halliwell Tank- E-coli Incident

Hi Peter,

Thankyou for being available on the phone at 12.00pm and 2pm today to discuss our positive e-coli water sample at Halliwell Tank.

As discussed at 12.00pm today we have had a positive e-coli on the common inlet outlet at the Halliwell Tank. This was an enumerated result of 1 eColi and total coliforms of 59.

The Halliwell zone is a small zone of approximately 30 houses. Water from this zone does is not transferred to other zones. (See picture attached)

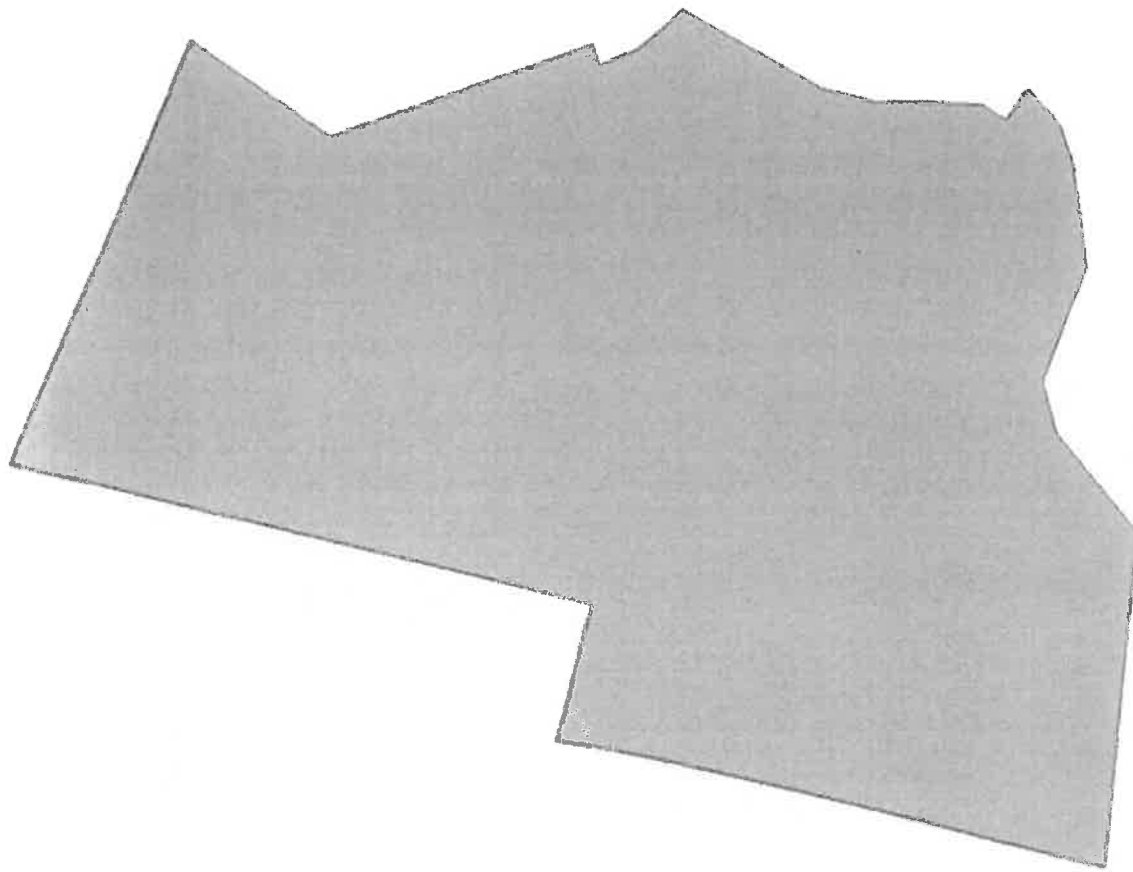
We have undertaken a physical inspection of the tank that determined that the water inside looked normal (ie no scum or other indicator of an major issue), as discussed a number of minor improvements and housekeeping issue were identified during this inspection.

As discussed at 2pm today it is our intention to isolate Halliwell Tank from the scheme, this will require some minor modifications to the scheme to allow customers to receive water with no discernible difference to the normal scheme operation. The plan is to:

- Enable the contingency operation from the Halliwell PS
- Isolate Halliwell Tank from the scheme
- Operate the scheme in contingency mode
- Super chlorinate the tank
- Dispose of chlorinated water to waste
- Refill and test tank
- Recommission reservoir

It is anticipated that the contingency operation will take 2 hours to arrange and this was initiated at 2:30pm. I will advise you when the tank has been isolated and this is estimated to occur at 4:30pm.

Further you mentioned that you like tour of the Napier Town Water Supply. We welcome the opportunity to show you around and estimate that a tour would take around half a day. Please let me know when you are available and I make arrangements to show you around. If there are any specific items of interest please let me know and I will include them in the tour.





Chris Dolley
 MANAGER ASSET STRATEGY
 Napier City Council, Private Bag 6010, Napier 4142
 t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz



public open day

SATURDAY 1 APRIL, 10AM - 3PM

IT'S FREE AND EVERYONE IS WELCOME!



NAPIER
conference centre

...the Napier City Council, Napier, New Zealand. The Napier Conference Centre is a...
 Napier Conference Centre, Napier, New Zealand.

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalssoftware.com



DISCLAIMER: This emailed information is private and protected by law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, or distribution, or the taking of any action based on the content of this information, is strictly prohibited. Please let us know immediately if you have received this by mistake and destroy this message.

Ian Jarvis

From: Matt Molloy <mattn@ehconsulting.co.nz>
Sent: Tuesday, 18 April 2017 10:17
To: Matt Molloy
Subject: Fw: Napier Water Supply- Halliwell Tank- E-coli Incident
Attachments: image001.jpg; image002.gif; image003.png; image004.jpg

From: Peter Wood
Sent: Monday, April 3, 2017 8:23 AM
To: Matt Molloy
Subject: FW: Napier Water Supply- Halliwell Tank- E-coli Incident

Hello Matt,

I should have included you into this one.

Regards,

Peter Wood
Health Protection Officer/Drinking Water Assessor, Public Health Services
MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442
Ph (06) 350 9110 | Fax: (06) 350 9111
Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

From: Peter Wood
Sent: Monday, 3 April 2017 8:20 a.m.
To: Maree Rohleder Hawkes bay; Cameron Ormsby; Nicholas Jones
Subject: FW: Napier Water Supply- Halliwell Tank- E-coli Incident

Hello all,

Here is Chris Dolley's report from Saturday night. I note the retest from the reservoir also came back positive for 1 *E. coli* and 46 total coliforms.

Regards,

Peter Wood
Health Protection Officer/Drinking Water Assessor, Public Health Services
MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442
Ph (06) 350 9110 | Fax: (06) 350 9111
Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

From: Chris Dolley [mailto:chris.dolley@napier.govt.nz]
Sent: Saturday, 1 April 2017 8:32 p.m.
To: Peter Wood
Subject: Re: Napier Water Supply- Halliwell Tank- E-coli Incident

Hi Peter,
Just an update on the Halliwell reservoir.

Yesterday we isolated the reservoir and commenced super chlorination
The contingency operational solution is working well, with residents being fed directly off the pump station
Today we got the result from the retest on the sample point which was also positive with ecoli of 1 and coliforms 46.

Tomorrow first thing we are doing additional sampling in the retic across 6 sites
Tomorrow Halliwell reservoir will be drained of the chlorinated water to waste and it will be refilled and tested early next week

Regards
Chris

Chris Dolley
Sent from my iPhone

On 1 Apr 2017, at 10:29 am, Peter Wood <Peter.Wood@midcentraldhb.govt.nz> wrote:

Hello chris,

Tuesday morning works well for me. I will aim to be in Napier as close to 0900 hours as I can. I have copied in Maree Rohleder and Cameron Ormsby from Hawkes Bay DHB. It would be good if Cameron could accompany me during the visit.

Regards,

Peter Wood
Health Protection Officer/Drinking Water Assessor, Public Health Services
MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442
Ph (06) 350 9110 | Fax: (06) 350 9111
Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

From: Chris Dolley [mailto:chris.dolley@napier.govt.nz]
Sent: Friday, 31 March 2017 5:52 p.m.
To: Peter Wood
Subject: RE: Napier Water Supply- Halliwell Tank- E-coli Incident

Hi Peter,

At this stage Tuesday 9-1pm would be a good time to show you around.
If this works for you please confirm and will make the necessary arrangements.

Chris

Chris Dolley
MANAGER ASSET STRATEGY
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz

<image001.jpg>

<image002.gif>

This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

From: Peter Wood [mailto:Peter.Wood@midcentraldhb.govt.nz]
Sent: Friday, 31 March 2017 3:52 p.m.
To: Chris Dolley <chris.dolley@napier.govt.nz>
Cc: Nicholas Jones <Nicholas.Jones@hawkesbaydhb.govt.nz>; Maree Rohleder Hawkes bay <Maree.Rohleder@hawkesbaydhb.govt.nz>
Subject: RE: Napier Water Supply- Halliwell Tank- E-coli Incident

Hello Chris,

Thank you for outlining the remedial action for this event. The aim of remedial action is either to ensure that the water supplied to this area meets the DWSNZ, or that people can take action to protect themselves. Based on our conversations and other sample results this plan is a practicable way of achieving the first of these objective.

I will be interested in the results from the samples collected today. I am available on my cell phone over the weekend.

I am available Monday and Tuesday next week, and it would be very helpful to gain a better understanding of the Taradale and Napier supply. I also have a few questions regarding the Water Safety Plan, and the utility of using the plan in a real event. I have referred to the WSP for the last two transgressions and struggled with the application of the contingency actions. I would like to discuss the WSP during my visit. I am interested in whether the time frame for preparation of the contingency plans can be brought forward. I am also interested in the reasoning behind the reference to 500 properties on page 26 – it does not appear practical or sensible if there is a public health risk or contaminated water.

I look forward to catching up with the team.

Regards,

Peter Wood
Health Protection Officer/Drinking Water Assessor, Public Health Services
MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442
Ph (06) 350 9110 | Fax: (06) 350 9111
Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

From: Chris Dolley [mailto:chris.dolley@napier.govt.nz]
Sent: Friday, 31 March 2017 3:19 p.m.
To: Peter Wood
Subject: Napier Water Supply- Halliwell Tank- E-coli Incident

Hi Peter,

Thankyou for being available on the phone at 12.00pm and 2pm today to discuss our positive e-coli water sample at Halliwell Tank.

As discussed at 12.00pm today we have had a positive e-coli on the common inlet outlet at the Halliwell Tank. This was an enumerated result of 1 eColi and total coliforms of 59.

The Halliwell zone is a small zone of approximately 30 houses. Water from this zone does is not transferred to other zones. (See picture attached)

We have undertaken a physical inspection of the tank that determined that the water inside looked normal (ie no scum or other indicator of an major issue), as discussed a number of minor improvements and housekeeping issue were identified during this inspection.

As discussed at 2pm today it is our intention to isolate Halliwell Tank from the scheme, this will require some minor modifications to the scheme to allow customers to receive water with no discernible difference to the normal scheme operation. The plan is to:

- Enable the contingency operation from the Halliwell PS
- Isolate Halliwell Tank from the scheme
- Operate the scheme in contingency mode
- Super chlorinate the tank
- Dispose of chlorinated water to waste
- Refill and test tank
- Recommission reservoir

It is anticipated that the contingency operation will take 2 hours to arrange and this was initiated at 2:30pm. I will advise you when the tank has been isolated and this is estimated to occur at 4:30pm.

Further you mentioned that you like tour of the Napier Town Water Supply. We welcome the opportunity to show you around and estimate that a tour would take around half a day. Please let me know when you are available and I make arrangements to show you around. If there are any specific items of interest please let me know and I will include them in the tour.

<image003.png><image004.jpg>

Chris Dolley

MANAGER ASSET STRATEGY

Napier City Council, Private Bag 6010, Napier 4142

t +64 6 833 9700 / ext 8700 m +64 27 470 9988 www.napier.govt.nz

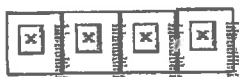
<image001.jpg>

<image002.gif>

This communication and any attachments is confidential. If you are not the intended recipient, please do not disclose. Thank you for your attention to this matter.

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalseftware.com



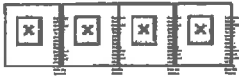
Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalssoftware.com



Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalssoftware.com





24 April 201

Malcolm Mc
Drinking Wa
Hawke's Bay
PO Box 447
NAPIER 414

Dear Malcol

INCIDENT R

1. Inciden

During t
sample
analyse
E.coli re
FJB029

2. Respon

The resu
Dolley, o
day, wh
informat
reading
of this s
of that e

The follo

- C
- A
- N
- A
- A
- C
- C

- Further samples were collected on 6 and 7 April 2017 directly from the reservoir, both returning negative results for *E.coli* and total coliforms. Results are attached.
- The reservoir was brought back into the scheme on 11 April 2017. Although all water samples taken after 31 March 2017 returned negative results, there was a delay in putting the reservoir back into service due to a high rainfall event.

3. Investigation

An investigation was carried out to determine the cause of the contamination, by physical inspection of the reservoir and bore sites, but nothing untoward was found.

4. Conclusion

Two positive *E.coli* results were received from Halliwell reservoir on 30 March 2017 and 31 March 2017. The contamination issue was resolved by isolating, chlorinating, emptying and refilling the reservoir.

Yours sincerely



Fiona Bruins
ENVIRONMENTAL MANAGEMENT OFFICER

Ian Jarvis

From: Matt Molloy
Sent: Thursday, 11 May 2017 16:40
To: 'Fiona Bruins'; Malcolm McGregor
Cc: Santha Agas; Maree Rohleder; peter.wood@midcentraldhb.govt.nz; Cameron Ormsby; Chris Dolley
Subject: RE: Taradale & Halliwell reservoir reports

Hi Fiona, We have had time to review the transgression reports for Taradale and Halliwell reservoirs and apologise for the delay in responding.

While I acknowledge that I suggested to use the Enfield reservoir transgression report as a guide, we feel that more detail is required in the reports, such as;

-is the sample tap sanitary, has there been any work on the reticulation in the area, is there any reason to suspect inadequate training for sampling officers, when was the reservoir last cleaned and inspected, is there a backflow risk from private residences.

-reports mention that checks of the reservoirs and bores were carried out but nothing found, this could be expanded on to include what was actually checked, maybe even a copy of the inspection checklist/notes.

-What does NCC think was the source of the transgression?

-What will NCC do to reduce the likelihood of it happening again (eg. Things like regular checks and inspections, extra monitoring samples, setting up chlorine injection points, consideration of chlorination of the supply).

Halliwell reservoir results sent through only show 2 clear tests for the reservoir after chlorination and flushing (6 & 7 April 2017), DWSNZ states 3 clear tests must be provided and the NCC WSP refers to the response procedures in the DWSNZ. Some of the communication issues around this have been discussed with Chris Dolley and Santha Agas (on April 19th) to ensure that things like this do not reoccur. Making sure there is written agreement between the NCC and the DWA on what is agreed is particularly important.

We also felt that it would be appropriate for a senior level water/asset manager to also sign off the reports as most of the actions undertaken and correspondence was done through the water team.

NCC may wish to contact its counterparts in Hastings District Council to see what they do for transgression reports.

We would be pleased to receive updated reports at your earliest convenience.

Kind regards

Matt

Matt Molloy
Drinking Water Assessor
Central North Island Drinking Water Assessment Unit –Napier
022 4444 662

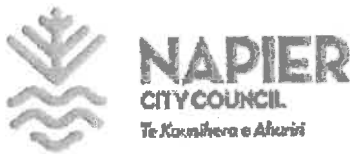
From: Fiona Bruins [mailto:fiona.bruins@napier.govt.nz]
Sent: Monday, 24 April 2017 16:36
To: Malcolm McGregor
Cc: Santha Agas; Matt Molloy; Maree Rohleder; peter.wood@midcentraldhb.govt.nz
Subject: Taradale & Halliwell reservoir reports

Good afternoon Malcolm,

Attached are our reports from the Taradale Reservoir and Halliwell Reservoir positive E.coli result incidents, along with the associated test results.

Kind regards,
Fiona

Fiona Bruins
ENVIRONMENTAL MANAGEMENT OFFICER
Napier City Council, Private Bag 6010, Napier 4142
f +64 6 836 5618 / ext 8618 m +64 27 403 3918 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please do not disseminate it and refer to the Electronic Transactions Act 2002.

Base Security

Act 15-

File: 38/05/02

21 July 2017

The Chief Executive
Napier City Council
Private Bag 6010
Napier 4142

Dear Sir

Re: Reclassification of all Bore Water Sources Napier (NAP001) Drinking Water Supply

On Thursday the 20th July 2017 Napier City Council (NCC) provided a final report Potable Water Bore Head Security within Napier City dated 12/07/2017 to the Napier Branch of the Central North Island Drinking Water Assessment Unit (CNIDWAU). Section 4.11 of this report concluded that: "Based on the incomplete information to date it is unlikely that any of the below ground water supply bores in NCC would meet the minimum requirements of the Drinking Water Standard (2008) for bore head security."

I have reviewed the list of proposed works provided in Sections 4.1 to 4.10 of the report and concur that some of these works highlight critical issues that are required to meet Section 4.5.2.2 Bore water security criterion 2 of the Drinking-water Standards for New Zealand 2005 (Revised 2008) DWSNZ. As a result of this report I hereby remove secure bore status from the Napier bores until such time as water security criterion 2 can be demonstrated. The bores affected are:

Source Code	Bore
G00061	T1 – Taradale 1, Burness Road Bore
G00062	T2 – Taradale 2, Bledisloe Park Bore
G00063	T4 – Taradale 4, No.3 Gloucester Street
G00064	T5 – Taradale 5, Opposite 189 Guppy Road
G00065	T3 – Taradale 3, Riverside Park Bore
G00067	C1 – Coverdale 1, Plantation Reserve, access off Kennedy Park
G01151	T6 – Taradale 6, Guppy Road, Carters Arm Park
G01395	T7 – Taradale 7, No.52 King Street
G02037	A1 – Awatoto 1, McLeod Road
No code	A2 – Awatoto 2, inside orchard Awatoto Road

I appreciate the cooperation that CNIDWAU has received regarding this assessment and look forward to the work plan addressing the time frames for completion of the improvements and demonstration of the criterion noted above.

It is recommended that Napier City Council immediately review their monitoring programme to ensure bacterial compliance with eh DWSNZ is maintained. To meet bacterial compliance criterion 1 (Section 4.3.1 of the DWSNZ) daily *E. coli* samples from each non-secure operational bore will be required. Napier City Council can assess bacterial compliance criterion 2, 3, 4 or 5 as alternatives, but these would all require installation of treatment that Napier City Council does not currently have.

Population Health

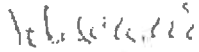
Napier Health Centre, 76 Wellesley Road, PO Box 447, Napier

Telephone 06 834 1815 Fax 06 834 1816

Website: www.hawkesbavdjh.govt.nz

I would take this opportunity to draw your attention to Section 69ZW of the Health Act 1956.
You have the right to request a review of this decision.

Yours faithfully



Peter Wood
Drinking Water Assessor
Technical Manager (Operations) – Central North Island Drinking Water Assessment Unit

cc: **Chief Executive, Hawkes Bay District Health Board**
Chris Dolley, Santha Agas, Napier City Council
Dr. Nicholas Jones, Medical Officer of Health
Jacqui Ritchie, ESR

Ian Jarvis

From: Maree Rohleder
Sent: Monday, 10 July 2017 13:01
To: Ian Jarvis
Subject: FW: Potable Water Bore Head Security within Napier City

Please also put this on HHealthscape under NCC Bore Security

From: Peter Wood [mailto:Peter.Wood@midcentraldhb.govt.nz]
Sent: Monday, 10 July 2017 11:59
To: Santha Agas <santha.agas@napier.govt.nz>
Cc: Maree Rohleder <Maree.Rohleder@hawkesbaydhb.govt.nz>; Cameron Ormsby <Cameron.Ormsby@hawkesbaydhb.govt.nz>; Matt Molloy <Matt.Molloy@hawkesbaydhb.govt.nz>; Chris Dolley <chris.dolley@napier.govt.nz>
Subject: Potable Water Bore Head Security within Napier City

Hello Santha,

I've put together some initial thoughts in preparation for our teleconference tomorrow I have been through the Drinking-water Standards for New Zealand 2005 (Revised 2008) (DWSNZ) and the Guidelines for Drinking-water Quality Management for New Zealand (Chapter 3, Water Sources – June 2017 version). These are my Initial thoughts based on my reading of these two documents, particularly DWSNZ Section 4.5.2.2.

The DWSNZ is the key document adopted under the Health Act 1956. Key aspects of the DWSNZ are:

1. The bore head must be sealed to prevent the ingress of surface water and contaminants.

There are some proposed works in the draft report that could be critical for this statement in the DWSNZ. I think the cable glands and the current location of the air valve could be critical. I'm not sure whether the electrical ducts would be critical, but this work does seem significant to ensure the system operates effectively. The split outlet hose on the sump pump also seems important to fix.

Raising the air vent 0.5 m above the 100 year flood level appears in the Guidelines. From section 3.2 of your report this is an issue still being worked through and the flood level is not known. I would like to discuss the air valves in underground chambers identified in Section 3.7.

2. Animals must be excluded from within 5 m of the bore head.

This primarily appears to affect Taradale 5. It is a "must" statement in the DWSNZ and we have discussed that this area of exclusion is minimal in any event.

3. The bore construction must comply with the environmental standard for drilling soil and rock (NZS 4411)...

A key aspect of this standard is section 2.5.2 regarding grouting. Injection of grout is a proposed work identified in the report for all the bores and should be considered critical.

4. ...including providing an effective backflow mechanism.

Installation of backflow prevention is proposed for all bores. This is an area where the DWSNZ specifically says I have some discretion. This is critical for Standards compliance. Related to this I am interested in the normal artesian head for these bores, and whether the artesian head changes seasonally. We can talk about the operation of submersible pumps, however if the artesian bore needs to be pumped then at this point I think backflow prevention devices are critical.

5. The casing must not allow ingress of shallow groundwater.

This seems very difficult to confirm without CCTV or pressure testing. The Guidelines state: "Where there is doubt about bore integrity there are a number of techniques, such as casing pressure tests and down-hole photography, which could be used but are likely to be beyond normal requirement. In general, above ground visual inspection and bore construction data would provide sufficient information." I am therefore considering what is appropriate in the current circumstances.

I am seeking further advice from the National Coordination Team – there is no point in me requiring all the works if not required.

Regards,

Peter Wood
Health Protection Officer/Drinking Water Assessor, Public Health Services
MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442
Ph (06) 350 9110 | Fax: (06) 350 9111
Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalssoftware.com



Ian Jarvis

From: Maree Rohleder
Sent: Thursday, 6 July 2017 09:05
To: Ian Jarvis
Subject: FW: NCC Water Supply - Chlorination
Attachments: Bore Head Security Interim Memo v1.pdf; Booster PS Review v2.pdf; Reservoir Inspection Action List June 2017.pdf

For Healthscape for Trangression NCC

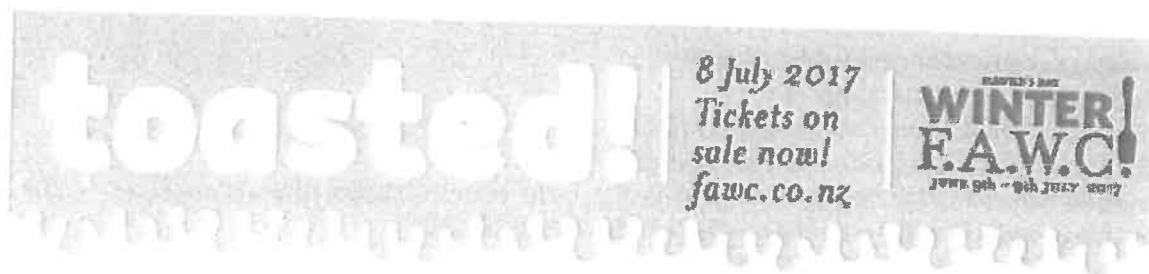
From: Santha Agas [mailto:santha.agas@napier.govt.nz]
Sent: Wednesday, 5 July 2017 17:21
To: Maree Rohleder <Maree.Rohleder@hawkesbaydhb.govt.nz>; Chris Dolley <chris.dolley@napier.govt.nz>
Cc: Peter Wood <Peter.Wood@midcentraldhb.govt.nz>; 'Matt Molloy' <mattm@ehconsulting.co.nz>; Cameron Ormsby <Cameron.Ormsby@hawkesbaydhb.govt.nz>
Subject: RE: NCC Water Supply - Chlorination

Hi Maree,

Attached are three inspection reports we have done so far with recommended action lists. We will also bring our incident reports and chlorination maps to the meeting for your review. See you tomorrow.

Regards

Santha Agas
TEAM LEADER 3 WATERS
Napier City Council, Private Bag 8010, Napier 4142
t +64 6 834 4152 / ext 8152 m +64 27 546 9127 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

From: Maree Rohleder [mailto:Maree.Rohleder@hawkesbaydhb.govt.nz]
Sent: Wednesday, 5 July 2017 1:41 PM
To: Santha Agas <santha.agas@napier.govt.nz>; Chris Dolley <chris.dolley@napier.govt.nz>
Cc: Peter Wood <Peter.Wood@midcentraldhb.govt.nz>; 'Matt Molloy' <mattm@ehconsulting.co.nz>
Subject: FW: NCC Water Supply - Chlorination

Hi Santha and Chris

Peter and Matt have drawn up this list of topics they wish to discuss/cover at our meeting tomorrow morning.

Cheers
Maree

From: Peter Wood [<mailto:Peter.Wood@midcentraldhb.govt.nz>]
Sent: Wednesday, 5 July 2017 13:32
To: Maree Rohleder <Maree.Rohleder@hawkesbaydhb.govt.nz>; Cameron Ormsby <Cameron.Ormsby@hawkesbaydhb.govt.nz>; Nicholas Jones <Nicholas.Jones@hawkesbaydhb.govt.nz>; 'Matt Molloy' <mattm@ehconsulting.co.nz>
Subject: RE: NCC Water Supply - Chlorination

List of topics for meeting tomorrow. Maree – will you contact Santha and send him this list?

1. Chlorination generally:
 - a. We want to see the extent of the chlorination and the extent of the non-chlorinated zone.
 - b. We want to see the FAC residuals for different parts of the network.
 - c. We want to ensure that chlorination has been stable at 0.2 mg/L – the minimum in the Drinking-water Standards for New Zealand 2005 (Revised 2008) (DWSNZ).
2. Sources:
 - d. What work has been done to verify that the sources are still secure? We would be interested in the integrity of the casing and whether any camera work has been done – note this is over the minimum requirements of the DWSNZ.
 - e. What work has been done on the bore heads?
 - f. What is the plan moving forward?
3. Reservoirs:
 - g. What is the current condition of the reservoirs?
 - h. Have they been inspected for leaks?
 - i. How are the air vents configured?
 - j. What does Council know about circulation in the reservoirs (are there any dead spots)?
4. Reticulation:
 - k. What is the general age and condition of the reticulation?
 - l. What is the leakage? When was this last assessed?
 - m. How many connections are there through the network? How many of these are protected by testable backflow protection devices? Are the test reports from the IQP available for review.
 - n. Where do water carriers connect to the system? What protection is there for the network from these takes? If any carriers are connecting to hydrants what are the precautions that NCC requires?
 - o. We want to assess procedures for reticulation repairs and replacements.
 - p. What is the current practice around sample taps and sample sites?
5. Supply Protection Generally
 - q. We want to see all the E. coli results from sources, reservoirs, and through the reticulation, broken down by area?
 - r. Does NCC have any comment on the evidence provided by the inquiry by Dr. Dan Deere? In particular can they comment on:
 - i. Whether the supply is adequately protected from contamination.
 - ii. How closely located are the drinking water and wastewater assets (of particular interest are pressurised wastewater assets).

- s. What is NCCs contingency if chlorination is removed and *E. coli* is detected? Is a chlorination reinstatement plan required?

Peter Wood

Health Protection Officer/Drinking Water Assessor, Public Health Services

MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442

Ph (06) 350 9110 | Fax: (06) 350 9111

Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives - Well Communities"

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalsoftware.com



DISCLAIMER: This emailed information is private and protected by law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, or distribution, or the taking of any action based on the content of this information, is strictly prohibited. Please let us know immediately if you have received this by mistake and destroy this message.

Enfield Rd
Transgression

2/2/2017

Ian Jarvis

From: Fiona Bruins <fiona.bruins@napier.govt.nz>
Sent: Thursday, 16 February 2017 11:22
To: Malcolm McGregor; Matt Molloy
Cc: Santha Agas; Chris Dolley; Jason Strong; Jon Kingsford
Subject: Enfield Reservoir Incident Report
Attachments: Letter to DHB 16.02.17.pdf; WTHB Results.pdf

Good morning Malcolm and Matt,

Please find attached a letter outlining the contamination issue at Enfield Reservoir and our response. Also attached are the results received from Water Testing Hawke's Bay for the sampling undertaken during this period.

Regards,
Fiona

Fiona Bruins
ENVIRONMENTAL MANAGEMENT OFFICER
Napier City Council, Private Bag 6010, Napier 4142
f +64 6 836 5618 / ext 8618 m +64 27 403 3918 www.napier.govt.nz



TOP TAP TIP #1 *in your backyard*

Brown grass is dormant, not dead. It will grow back once the weather cools and rainfall increases, so embrace brown - it's the new green!

This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. E-mail to: ian.j Jarvis@napier.govt.nz

Ian Jarvis

From: Nicholas Jones
Sent: Friday, 10 February 2017 21:25
To: Maree Rohleder; Matt Molloy
Subject: Fwd: Enfield Road Reservoir Transgression, Napier - update
Attachments: image001.jpg

Sent from my iPhone

Begin forwarded message:

From: Wayne Jack <waynej@napier.govt.nz>
Date: 10 February 2017 at 2:34:00 PM NZDT
To: Peter Wood <Peter.Wood@midcentraldhb.govt.nz>
Cc: Nicholas Jones <Nicholas.Jones@hawkesbaydhb.govt.nz>, Chris Dolley <chris.dolley@napier.govt.nz>
Subject: Enfield Road Reservoir Transgression, Napier - update

Hi Peter,

Just following up on our telephone conversations that we have had regarding the positive test for e-Coli at the Enfield Road reservoir.

On Monday of this week we received three clear e-Coli tests indicating that the ongoing chlorination has removed the contamination from the water. We have continued ongoing testing of the source and retic areas, which have remained clear indicating the issue was contained solely at the Enfield Reservoir. We also have information from our system that indicates the test was taken on water going out of the tank and not going into the reservoir (the reservoir has one pipe for in/out flow)

Rather than returning the reservoir to service we have elected to engage a dive team to undertake the following:

- Inspection of both Enfield Reservoir compartments
- Clean both Enfield Reservoir compartments

The dive team have commenced this work on Thursday with the work to be completed on Friday 10 February.

As we have had divers in the reservoir we have continued with chlorination of the Enfield Reservoir. We have taken a very cautionary approach to this and are aware of this risk and will therefore continue chlorination until we have 3 clear tests from the Enfield Road reservoir once the divers complete their work. We therefore expect chlorination will continue until Tuesday afternoon next week. After this we will chlorination will cease.

There are two main theories behind the single positive e-Coli detection, that was at the lower limit of detection:

- Visual inspection of the reservoir water body revealed a film of dust and pollen that is not usually detectable. This was most prevalent in the small compartment. As you

are aware we have had a very hot and dry summer with a lot of wind. It is possible that contaminated dust particles led to a low level of e-coli and assessed as being the most likely cause of the contamination. We are taking steps to put in other measures for the protection of the vents in the reservoirs.

- Visual inspection of the reservoir protection from vermin revealed that the stop gate on the overflow pipe was stuck half open. However, following the diver inspection of the reservoirs there was no evidence of contamination in the reservoir and is therefore deemed to be unlikely that contamination occurred this way.

The inspection and cleaning of both reservoir compartments will eliminate any further risk of contamination prior to bringing Enfield Reservoir back into normal non chlorinated water mode. We will have both tanks into service on Saturday, but as discussed above these will continue to be chlorinated until we receive three clear tests.

If you have any further questions please do not hesitate to call.

Regards

Wayne Jack

CHIEF EXECUTIVE

Napier City Council, Private Bag 6010, Napier 4142

t +64 6 834 4159 m +64 27 598 9848 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002

From: Peter Wood [<mailto:Peter.Wood@midcentraldhb.govt.nz>]

Sent: Monday, 6 February 2017 9:44 a.m.

To: Wayne Jack <waynej@napier.govt.nz>

Cc: Maree Rohleder Hawkes bay <Maree.Rohleder@hawkesbaydhb.govt.nz>; Malcolm McGregor <Malcolm.McGregor@hawkesbaydhb.govt.nz>; Matt Molloy <mattm@ehconsulting.co.nz>; Nicholas Jones <Nicholas.Jones@hawkesbaydhb.govt.nz>; Joanne Lynch <Joanne.Lynch@hawkesbaydhb.govt.nz>

Subject: Enfield Road Reservoir Transgression, Napier

Hello Wayne,

Thank you for your time on Friday afternoon. I apologise for the delay in sending this confirmatory email.

Based on our conversation of Friday afternoon it is my understanding that:

- An enumerated *E. coli* result of 1.1 was isolated from the Enfield road reservoir.
- Chlorination was to continue until 3 clear samples had been achieved.
- Napier City Council had determined a possible cause for the contamination of the reservoir.

It is my understanding that a thin film of dust was noted over the surface of the water in part of the reservoir. If that dust contained a small amount of faecal material (e.g. from dried bird droppings) that could account for the low level contamination.

I would like Napier City Council to consider whether there are any straightforward, easy to implement improvements that could provide additional protection for this reservoir. These can be included in the Napier City Water Safety Plan as part of the debrief to this event.

Regards,

Peter Wood

Technica Manager (Operations), Central North Island Drinking Water Assessment Unit

MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442

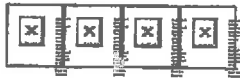
Ph (06) 350 9110 | Fax: (06) 350 9111

Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives"

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalssoftware.com



Ian Jarvis

From: Nicholas Jones
Sent: Thursday, 2 February 2017 16:22
To: Maree Rohleder; Malcolm McGregor; Matt Molloy; Peter Wood; Anna Kirk; Jenny Cawston; Kevin Snee; Cameron Ormsby
Subject: Fwd: Enfield Road water test
Attachments: image001.jpg; image002.jpg

Sent from my iPhone

Begin forwarded message:

From: Wayne Jack <waynej@napier.govt.nz>
Date: 2 February 2017 at 3:19:35 PM NZDT
To: Nicholas Jones <Nicholas.Jones@hawkesbaydhb.govt.nz>
Cc: Jon Kingsford <jon.kingsford@napier.govt.nz>, Chris Dolley <chris.dolley@napier.govt.nz>
Subject: Enfield Road water test

Hi Nick,

Further to our telephone calls that we have had regarding the first positive E.coli result in the Enfield Reservoir in the sample that was taken yesterday morning. All other samples taken yesterday from Napier, Taradale and Bay View were negative. We have commenced an immediate investigation into the cause and are taking further samples from the Reservoir today and from the distribution network around the area.

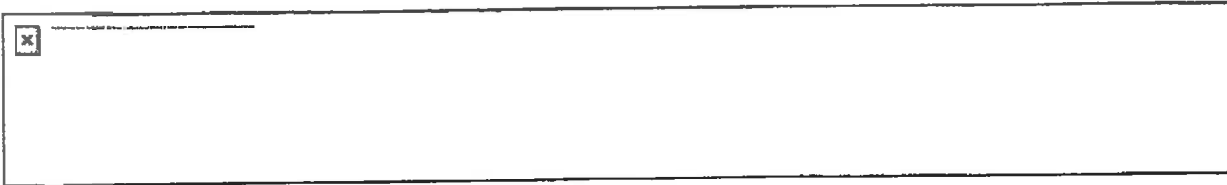
Whilst the drinking water standards do not require any immediate action at this point of time until the second test is completed we are as a 'super precautionary' action going to chlorinate the Enfield Rd reservoir as we have discussed with you. We will not be issuing a boil water notice as you have agreed there is insufficient evidence at this point of time to warrant such an action and chlorination is appropriate.

Our Comms team is talking to DHB Comms and will be issuing a media release regarding the action being taken and this will be promulgated through social media and other avenues.

Any questions please call.

Wayne Jack
CHIEF EXECUTIVE
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 834 4159 m +64 27 598 9848 www.napier.govt.nz





This document contains financial information that is confidential. If you are not the intended recipient, please do not disseminate this information. If you have received this document in error, please notify the sender immediately. For more information, refer to the Electronic Transactions Act 2002.



16 February 2017

Malcolm McGregor
Drinking Water Assessor
Hawke's Bay District Health Board
PO Box 447
NAPIER 4140

Dear Malcolm

INCIDENT REPORT: POSITIVE *E.COLI* RESULT – ENFIELD RESERVOIR, NAPIER

1. Incident

During the Napier City Council routine water sampling carried out on 1 February 2017, a sample was taken from Enfield Reservoir at 10 Oliver Road, Napier in Sampling Zone 4 at 10:15 am. The sample was analysed in the Napier City Council laboratory on 2 February 2017 at 10:45 am and had returned a positive *E.coli* result using the Colilert presence/absence method. The sample number was FJB0004.

2. Response

The incident was reported to Malcolm McGregor, Drinking Water Assessor, Santha Agas, Team Leader 3 Waters, Chris Dolley, Manager Asset Strategy, Jon Kingsford, Director Infrastructure, Jason Strong, Environmental Solutions Manager, Dean Hammond, Team Leader Water and Lance Titter, Director City Services on 2 February 2017 at 11:38 am.

Daily sampling commenced immediately at the Enfield Reservoir from the normal sampling tap, as well as dip samples taken directly from both the large and small Enfield tanks. Samples were also taken from various points in the reticulation and from each of the bores. All samples were taken to Water Testing Hawke's Bay, an independent IANZ accredited laboratory, for enumeration testing using MPN and MF methods. The Napier City Council laboratory was also used during this time to continue with the normal monitoring programme.

Follow-up sampling on 2 February 2017 returned a second positive *E.coli* result of 1.1 cfu/100ml from the small Enfield tank. All other samples from the large Enfield tank, reticulation and bores returned negative results for both total coliforms and *E.coli*.

In addition to the sampling, the following actions were undertaken in response to the incident:

- Enfield Reservoir has two internal compartments, a large and a small compartment. The capacities of these compartments are approximately 4,500m³ and 5,500m³. The contamination of water was found in the smaller compartment and this compartment was isolated immediately from the reticulation.
- Chlorination of both compartments of the Enfield Reservoir commenced on 2 February 2017 around 5.00 pm. Sodium Hypochlorite was added to the reservoir manually and the residual chlorine was checked regularly. The residual chlorine in the reservoir was maintained at a level between 0.2 mg/l to 0.4 mg/l. Residual chlorine levels were checked immediately downstream of the reservoir.
- The public were advised of the contamination issue and water chlorination through the media, including social-media.
- Temporary taps were installed at Anderson Park to give the public the option of taking chlorine-free water, if they wanted to.
- On 9 February 2017, the Council engaged Commercial Diving Services to inspect the inside of the reservoir and clean both compartments of the reservoir. This was completed on 11 February 2017. Divers did not find any foreign objects in the reservoir apart from a rusted piece of GI pipe and some sedimentation.

Daily sampling of Enfield Reservoir continued until 13 February 2017, when three consecutive negative *E.coli* results, after the divers had finished their work in the tanks, had been returned.

All Water Testing Hawke's Bay results from the sampling undertaken between 2 February 2017 and 13 February 2017 are attached to this report.

3. Investigation

An investigation was carried out to determine the cause of the contamination. The reservoir was externally inspected to observe whether there were any points where vermin could get into the reservoir. The inspection found that a flap valve at the end of the reservoir overflow pipe was open and not functioning properly. This was rectified immediately. However, there was no evidence that vermin had got into the reservoir from the internal inspection by the divers.

A thin layer of scum-like material was observed floating on the surface of the water in the reservoir. This was cleaned out by the divers.

4. Conclusion

There was no conclusive evidence as to the source of the reservoir contamination. The most likely source could be the scum build-up in the reservoir as a result of pollen and dust entering the reservoir through the ventilation units during the warm weather conditions. Council staff will be monitoring the reservoir regularly to minimise the risk of happening this again.

The response protocol in the Drinking Water Standards 2005 (Revised 2008) was followed for this incident.

Yours sincerely

A handwritten signature in black ink, appearing to read 'F. Bruins', written in a cursive style.

Fiona Bruins
ENVIRONMENTAL MANAGEMENT OFFICER

Ian Jarvis

From: Matt Molloy
Sent: Thursday, 16 February 2017 15:00
To: 'Fiona Bruins'; Malcolm McGregor; Nicholas Jones; Maree Rohleder; Peter Wood
Cc: Santha Agas; Chris Dolley; Jason Strong; Jon Kingsford
Subject: RE: Enfield Reservoir Incident Report

Hi Fiona, thank you for the report and the sample results following the detection of E.coli in the Enfield Reservoir. While the cause was not definitively confirmed, the response and corrective actions were appropriate.

It is now appropriate for NCC to discontinue the chlorine dosing of the Enfield reservoir.

If you have any questions or queries please contact me.

Kind regards
Matt

Matt Molloy
Drinking Water Assessor
Central North Island Drinking Water Assessment Unit –Napier
022 444 4662

From: Fiona Bruins [mailto:fiona.bruins@napier.govt.nz]
Sent: Thursday, 16 February 2017 11:22
To: Malcolm McGregor; Matt Molloy
Cc: Santha Agas; Chris Dolley; Jason Strong; Jon Kingsford
Subject: Enfield Reservoir Incident Report

Good morning Malcolm and Matt,

Please find attached a letter outlining the contamination issue at Enfield Reservoir and our response. Also attached are the results received from Water Testing Hawke's Bay for the sampling undertaken during this period.

Regards,
Fiona

Fiona Bruins
ENVIRONMENTAL MANAGEMENT OFFICER
Napier City Council, Private Bag 6010, Napier 4142
f +64 6 836 5618 / ext 8618 m +64 27 403 3918 www.napier.govt.nz





TOP TAP TIP #1 *in your backyard*

Brown grass is dormant, not dead. It will grow back once the weather cools and rainfall increases, so embrace brown – it's the new green!



NAPIER
CITY COUNCIL
To flourish - to thrive

This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Enter to the Electronic Transactions Act 2002.

Ian Jarvis

From: Matt Molloy
Sent: Thursday, 16 February 2017 14:25
To: 'Fiona Bruins'
Subject: RE: Enfield Reservoir Incident Report

Awesome thanks

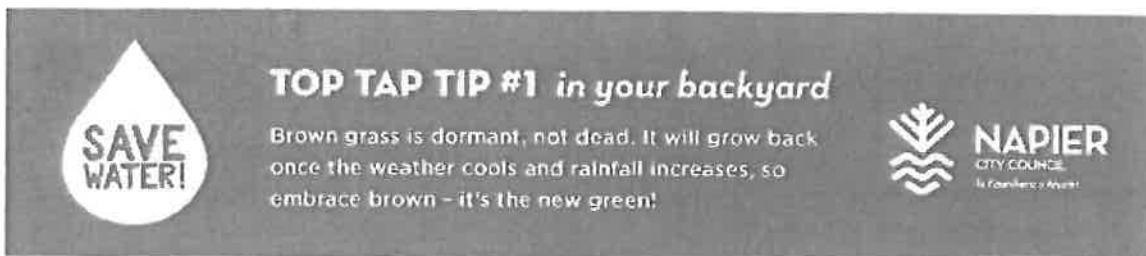
From: Fiona Bruins [mailto:fiona.bruins@napier.govt.nz]
Sent: Thursday, 16 February 2017 14:23
To: Matt Molloy
Subject: RE: Enfield Reservoir Incident Report

Hi Matt,

Yes all samples, as soon as the water supply was chlorinated, were taken using sodium thiosulphate bottles.

Regards
Fiona

Fiona Bruins
ENVIRONMENTAL MANAGEMENT OFFICER
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 836 5618 / ext 8618 m +64 27 403 3918 www.napier.govt.nz



This e-mail and any attachments is confidential. If you are not the intended recipient, please delete it. Thank you. E.O.A. to the Electronic Transactions Act 2002.

From: Matt Molloy [mailto:Matt.Molloy@hawkesbaydhb.govt.nz]
Sent: Thursday, 16 February 2017 2:18 p.m.
To: Fiona Bruins <fiona.bruins@napier.govt.nz>
Subject: RE: Enfield Reservoir Incident Report

Hi Fiona, before I officially respond can you please clarify if sodium thiosulphate treated sample bottles were used for the chlorinated water E.coli samples?

Regards
Matt

From: Fiona Bruins [mailto:fiona.bruins@napier.govt.nz]
Sent: Thursday, 16 February 2017 11:22
To: Malcolm McGregor; Matt Molloy
Cc: Santha Agas; Chris Dolley; Jason Strong; Jon Kingsford
Subject: Enfield Reservoir Incident Report

Good morning Malcolm and Matt,

Please find attached a letter outlining the contamination issue at Enfield Reservoir and our response. Also attached are the results received from Water Testing Hawke's Bay for the sampling undertaken during this period.

Regards,
Fiona

Fiona Bruins
ENVIRONMENTAL MANAGEMENT OFFICER
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 836 5618 / ext 8618 m +64 27 403 3918 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. (Refer to the Electronic Transactions Act 2002).

DISCLAIMER: This emailed information is private and protected by law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, or distribution, or the taking of any action based on the content of this information, is strictly prohibited. Please let us know immediately if you have received this by mistake and destroy this message.

Ian Jarvis

From: Malcolm McGregor
Sent: Thursday, 2 February 2017 12:13
To: 'Santha Agas'
Cc: Maree Rohleder; Peter Wood (peter.wood@midcentraldhb.govt.nz); Matt Molloy; Rachel Eyre
Subject: RE: Positive E.coli result

Hi Santha,

We agree that the sampling of the bores is required as a response to the positive E.coli result at the Enfield reservoir.

Can you send me a copy of the procedures that you are following for this matter. Also what is your capacity for emergency chlorination of the reservoir/reticulation should this be considered necessary. We strongly advise that you consider immediately chlorinating the Enfield reservoir as a precautionary measure.

What areas of Napier are supplied from the effected reservoir?

Please keep me informed of progress with this matter.

Regards

Malcolm

Malcolm McGregor | Drinking Water Technician| Central North Island Drinking Water Assessment Unit | Population Health

Hawke's Bay District Health Board
P.O. Box 447, Napier

Physical address: 76 Wellesley Road Napier
T: ++64 6 834 1815 ext 4342 | F: ++ 64 6 834 1816 | Mob: 027 292 2129

W: www.hawkesbay.health.nz

Email: malcolm.mcgregor@hawkesbaydhb.govt.nz

Please note my office hours are 8 am to 5 pm Mondays, Thursdays and Fridays each week.

From: Santha Agas [<mailto:santha.agas@napier.govt.nz>]
Sent: Thursday, 2 February 2017 11:44
To: Fiona Bruins; Malcolm McGregor; Chris Dolley; Jason Strong; Jon Kingsford; Dean Hammond; Lance Titter
Subject: RE: Positive E.coli result

Hi Fiona,

As discussed, please take samples from the bore sources also as a precautionary measure.

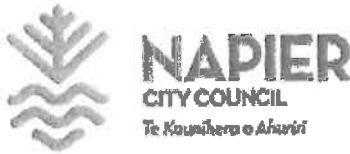
Regards

Santha Agas

TEAM LEADER 3 WATERS

Napier City Council, Private Bag 6010, Napier 4142

f +64 6 834 4152 / ext 8152 m +64 27 546 9127 www.napier.govt.nz



This communication, including any attachments, is confidential if you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

From: Fiona Bruins

Sent: Thursday, 2 February 2017 11:38 a.m.

To: Malcolm.McGregor@hawkesbaydhb.govt.nz; Santha Agas; Chris Dolley; Jason Strong; Jon Kingsford; Dean Hammond; Lance Titter

Subject: Positive E.coli result

Importance: High

Hi all,

There has been a positive E.coli result in the Enfield Reservoir in the sample that was taken yesterday morning. All other samples taken yesterday from Napier, Taradale and Bay View were negative however.

An immediate investigation into the cause will need to be carried out and remedial action taken if necessary.

I am going to take further samples from the Reservoir today and from the distribution network around the area. These samples will go to Water Testing Hawke's Bay for E.coli enumeration and I will continue to sample each day until we get three consecutive days of clear results.

Regards

Fiona Bruins

ENVIRONMENTAL MANAGEMENT OFFICER

Napier City Council, Private Bag 6010, Napier 4142

f +64 6 836 5618 / ext 8618 m +64 27 403 3918 www.napier.govt.nz



This communication, including any attachments, is confidential if you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

Ian Jarvis

From: Peter Wood <Peter.Wood@midcentraldhb.govt.nz>
Sent: Thursday, 2 February 2017 13:53
To: 'Santha Agas'
Cc: Maree Rohleder; Matt Molloy; Rachel Eyre; Chris Dolley; Malcolm McGregor; Nicholas Jones
Subject: RE: Positive E.coli result

Hello Santha,

Thanks for speaking with me today. I think the response needs to be appropriate. My concern is that when by following the figure in the drinking-water standards, Napier City Council will lose a day where contaminated water could be distributed throughout the distribution zone.

In the sampling run the only positive sample was from the Enfield reservoir. Chlorinating the reservoir appears to me to be the most effective immediate remedial action available to Napier City Council.

If Napier City Council issues a boil water notice, Council will have to identify how they will issue the notice, and plan for the eventual removal of the notice. I am available by phone today (my mobile is 0274 450 807).

Regards,

Peter Wood

Technical Manager Operations; Central North Island Drinking Water Assessment Unit

MidCentral Health | Private Bag 11036, Ruahine Street, Palmerston North 4442

Ph (06) 350 9110 | Fax: (06) 350 9111

Email: peter.wood@midcentraldhb.govt.nz

"Quality Living - Healthy Lives"

From: Santha Agas [mailto:santha.agas@napier.govt.nz]
Sent: Thursday, 2 February 2017 12:31 p.m.
To: Malcolm McGregor
Cc: Maree Rohleder; Peter Wood; Matt Molloy; Rachel Eyre; Chris Dolley
Subject: RE: Positive E.coli result

Hi Malcom,

We are following the procedure in Figure 4.2 of the current drinking water standards. At present, apart from sampling at different locations, our operations and maintenance crew is checking the reservoir and the site to understand any issues/vulnerability.

Our plan is to issue a boil water notice as soon as we get to know the contamination level. Meantime, I am liaising with Filtec regarding emergency chlorination if required.

The whole network is interlinked and Enfield reservoir predominantly supply to central city, Hospital Hill, Bluff Hill, part of Taradlae and Bay View. Will keep you informed about the progress.

Regards

Santha Agas

TEAM LEADER 3 WATERS

Napier City Council, Private Bag 6010, Napier 4142

t +64 6 834 4152 / ext 8152 m +64 27 546 9127 www.napier.govt.nz



NAPIER

CITY COUNCIL

Te Kaitiaki o Aotearoa



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

From: Malcolm McGregor [<mailto:Malcolm.McGregor@hawkesbaydhb.govt.nz>]

Sent: Thursday, 2 February 2017 12:13 p.m.

To: Santha Agas

Cc: Maree Rohleder; Peter Wood (peter.wood@midcentraldhb.govt.nz); Matt Molloy; Rachel Eyre

Subject: RE: Positive E.coli result

Hi Santha,

We agree that the sampling of the bores is required as a response to the positive E.coli result at the Enfield reservoir.

Can you send me a copy of the procedures that you are following for this matter. Also what is your capacity for emergency chlorination of the reservoir/reticulation should this be considered necessary. We strongly advise that you consider immediately chlorinating the Enfield reservoir as a precautionary measure.

What areas of Napier are supplied from the effected reservoir?

Please keep me informed of progress with this matter.

Regards

Malcolm

Malcolm McGregor | Drinking Water Technician | Central North Island Drinking Water Assessment Unit | Population Health

Hawke's Bay District Health Board
P.O. Box 447, Napier

Physical address: 76 Wellesley Road Napier
T: ++64 6 834 1815 ext 4342 | F: ++ 64 6 834 1816 | Mob: 027 292 2129

W: www.hawkesbay.health.nz

Email: malcolm.mcgregor@hawkesbaydhb.govt.nz

Please note my office hours are 8 am to 5 pm Mondays, Thursdays and Fridays each week.

From: Santha Agas [<mailto:santha.agas@napier.govt.nz>]

Sent: Thursday, 2 February 2017 11:44

To: Fiona Bruins; Malcolm McGregor; Chris Dolley; Jason Strong; Jon Kingsford; Dean Hammond; Lance Titter

Subject: RE: Positive E.coli result

Hi Fiona,

As discussed, please take samples from the bore sources also as a precautionary measure.

Regards

Santha Agas

TEAM LEADER 3 WATERS

Napier City Council, Private Bag 6010, Napier 4142

t +64 6 834 4152 / ext 8152 m +64 27 546 9127 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

From: Fiona Bruins

Sent: Thursday, 2 February 2017 11:38 a.m.

To: Malcolm.McGregor@hawkesbaydhb.govt.nz; Santha Agas; Chris Dolley; Jason Strong; Jon Kingsford; Dean Hammond; Lance Titter

Subject: Positive E.coli result

Importance: High

Hi all,

There has been a positive E.coli result in the Enfield Reservoir in the sample that was taken yesterday morning. All other samples taken yesterday from Napier, Taradale and Bay View were negative however.

An immediate investigation into the cause will need to be carried out and remedial action taken if necessary.

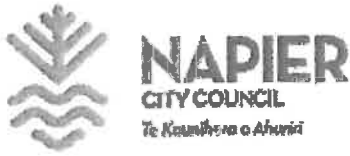
I am going to take further samples from the Reservoir today and from the distribution network around the area. These samples will go to Water Testing Hawke's Bay for E.coli enumeration and I will continue to sample each day until we get three consecutive days of clear results.

Regards

Fiona Bruins

ENVIRONMENTAL MANAGEMENT OFFICER

Napier City Council, Private Bag 6010, Napier 4142
t +64 6 836 5618 / ext 8618 m +64 27 403 3918 www.napier.govt.nz

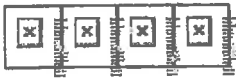


This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

DISCLAIMER: This emailed information is private and protected by law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, or distribution, or the taking of any action based on the content of this information, is strictly prohibited. Please let us know immediately if you have received this by mistake and destroy this message.

Attention:

This e-mail message and any attachments contain information that is confidential and may be subject to Legal and Medical privilege. If you are not the intended recipient, you must not peruse, use, pass on or copy this message or any attachments. If you have received this e-mail in error, please notify us by return e-mail and erase all copies of this message including any attachments. MidCentral District Health Board does not accept any liability in respect of any virus which is not detected. This e-mail message has been scanned and cleared by MailMarshal www.marshalssoftware.com



Ian Jarvis

From: Santha Agas <santha.agas@napier.govt.nz>
Sent: Thursday, 2 February 2017 12:31
To: Malcolm McGregor
Cc: Maree Rohleder; Peter Wood (peter.wood@midcentraldhb.govt.nz); Matt Molloy; Rachel Eyre; Chris Dolley
Subject: RE: Positive E.coli result

Hi Malcom,

We are following the procedure in Figure 4.2 of the current drinking water standards. At present, apart from sampling at different locations, our operations and maintenance crew is checking the reservoir and the site to understand any issues/vulnerability.

Our plan is to issue a boil water notice as soon as we get to know the contamination level. Meantime, I am liaising with Filtec regarding emergency chlorination if required.

The whole network is interlinked and Enfield reservoir predominantly supply to central city, Hospital Hill, Bluff Hill, part of Taradlae and Bay View. Will keep you informed about the progress.

Regards



Santha Agas
TEAM LEADER 3 WATERS
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 834 4152 / ext 8152 m +64 27 546 9127 www.napier.govt.nz



This e-mail contains information that may be confidential. If you have received this e-mail by mistake, please notify the sender immediately by e-mail. Do not disseminate, distribute or copy this e-mail. Please refer to the Electronic Transactions Act 2002.

From: Malcolm McGregor [mailto:Malcolm.McGregor@hawkesbaydhb.govt.nz]
Sent: Thursday, 2 February 2017 12:13 p.m.
To: Santha Agas
Cc: Maree Rohleder; Peter Wood (peter.wood@midcentraldhb.govt.nz); Matt Molloy; Rachel Eyre
Subject: RE: Positive E.coli result

Hi Santha,

We agree that the sampling of the bores is required as a response to the positive E.coli result at the Enfield reservoir.

Can you send me a copy of the procedures that you are following for this matter. Also what is your capacity for emergency chlorination of the reservoir/reticulation should this be considered necessary. We strongly advise that you consider immediately chlorinating the Enfield reservoir as a precautionary measure.

What areas of Napier are supplied from the effected reservoir?

Please keep me informed of progress with this matter.

Regards

Malcolm

Malcolm McGregor | Drinking Water Technician | Central North Island Drinking Water Assessment Unit | Population Health

Hawke's Bay District Health Board
P.O. Box 447, Napier

Physical address: 76 Wellesley Road Napier
T: ++64 6 834 1815 ext 4342 | F: ++ 64 6 834 1816 | Mob: 027 292 2129

W: www.hawkesbay.health.nz

Email: malcolm.mcgregor@hawkesbaydhb.govt.nz

Please note my office hours are 8 am to 5 pm Mondays, Thursdays and Fridays each week.

From: Santha Agas [<mailto:santha.agas@napier.govt.nz>]

Sent: Thursday, 2 February 2017 11:44

To: Fiona Bruins; Malcolm McGregor; Chris Dolley; Jason Strong; Jon Kingsford; Dean Hammond; Lance Titter

Subject: RE: Positive E.coli result

Hi Fiona,

As discussed, please take samples from the bore sources also as a precautionary measure.

Regards

Santha Agas
TEAM LEADER 3 WATERS
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 834 4152 / ext 8152 m +64 27 546 9127 www.napier.govt.nz





This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

From: Fiona Bruins
Sent: Thursday, 2 February 2017 11:38 a.m.
To: Malcolm.McGregor@hawkesbaydhb.govt.nz; Santha Agas; Chris Dolley; Jason Strong; Jon Kingsford; Dean Hammond; Lance Titter
Subject: Positive E.coli result
Importance: High

Hi all,

There has been a positive E.coli result in the Enfield Reservoir in the sample that was taken yesterday morning. All other samples taken yesterday from Napier, Taradale and Bay View were negative however.

An immediate investigation into the cause will need to be carried out and remedial action taken if necessary.

I am going to take further samples from the Reservoir today and from the distribution network around the area. These samples will go to Water Testing Hawke's Bay for E.coli enumeration and I will continue to sample each day until we get three consecutive days of clear results.

Regards

Fiona Bruins
ENVIRONMENTAL MANAGEMENT OFFICER
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 836 5618 / ext 8618 m +64 27 403 3918 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

DISCLAIMER: This emailed information is private and protected by law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, or distribution, or the taking of any action based on the content of this information, is strictly prohibited. Please let us know immediately if you have received this by mistake and destroy this message.

Anna Kirk

From: Anna Kirk
Sent: Thursday, 2 February 2017 15:33
To: 'Fiona Fraser'
Subject: HBDHB revised PR
Attachments: Chlorination Napier February 2017 (2).doc

Hi Fiona

Revised PR attached just waiting for final sign off

From: Fiona Fraser [mailto:fiona.fraser@napier.govt.nz]
Sent: Thursday, 2 February 2017 15:24
To: Wayne Jack; Rebecca Ainsworth; Kirsten Simcox; Monique Jeffares; Tania McCauley; Bill Dalton
Cc: Chris Dolley; Jon Kingsford; Anna Kirk
Subject: REDRAFTED MESSAGING for tourism, businesses, residents, website, media

Napier City Council has this afternoon chlorinated the water in one of its reservoirs after routine testing returned a positive test for e-coli. The reservoir is the Enfield Rd reservoir and it services much of Napier including Taradale and Bayview during peak season.

All other reservoirs have tested clear.

National water standards are that, in any situation where a positive reading is returned, water is re-tested within 24 hours to check for a second positive before acting. However given the learnings from previous water situations in New Zealand, Council has acted conservatively, and immediately.

Napier Mayor Bill Dalton is reassuring residents that there is no need to boil water – and that the chlorine is doing its job. "We are taking the precaution of chlorinating ahead of the second test results being available to us, just to be on the safe side. We are advising residents not to panic – and that we will be in touch again as soon as we possibly can."

As an extra precaution, Council is also re-testing every other reservoir in the Napier City network.

Schools and businesses, tourism operators and so on are being directly contacted by the Council team to advise of the chlorination.

The results of the second test for e-coli will be with Council tomorrow (Friday 3rd February) and we will update Napier then.

Fiona Fraser
MANAGER COMMUNICATIONS AND MARKETING
Napier City Council, Private Bag 6010, Napier 4142
t +64 6 834 4144 / ext 8144 m +64 27 501 3921 www.napier.govt.nz



This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.



HAWKE'S BAY
District Health Board

Whakawāteatia

Media Release

2 February 2017

Napier water to be chlorinated as precaution

Hawke's Bay District Health Board and Napier City Council have agreed chlorination of the Enfield Road Reservoir that supplies much of Napier is necessary, as a precautionary measure, following a positive e-coli sample result from the reservoir today.

The Enfield Road Reservoir services much of Napier including Taradale and Bay View at the moment.

Medical Officer of Health Nick Jones said further testing would be done as today's result was an indicative test. "This test does not give us a clear idea of whether it is a health concern at this stage, however, chlorinating the water was the only way to prevent potentially contaminated water from being distributed throughout the reservoir's zone."

Dr Jones said if the water was contaminated we didn't want to lose a day waiting for further testing to come back.

There have been no increased reports of sickness in the Napier area, however if anyone was feeling sick with diarrhoea and/or vomiting that lives in this area they should see or call their health professional or call Healthline 0800 611 116

The district health board has alerted the Ministry of Health and general practice in the Napier area. Napier schools have also been asked to report any increase in sickness to the Ministry of Education.

Dr Jones said the risk of contamination in the reticulated water system, supplied by the Enfield Road Reservoir, was low as tests from the water in the system outside of the reservoir were negative.

Ends

For further information please contact:

Anna Kirk

Anna.kirk@hbdhb.govt.nz

Communication Manager

Hawke's Bay District Health Board

Telephone: (06) 873 2150 or (027) 234 3667

From: Anna Kirk
Sent: Friday, 3 February 2017 17:34
To: Tania McCauley
Subject: Re: MEDIA RELEASE Chlorination of Napier

Thanks Tania

Sent from my iPhone

On 3/02/2017, at 5:17 PM, Tania McCauley <taniam@napier.govt.nz> wrote:

Chlorination to continue through long weekend

Friday 3 February 2017

A second positive result for e-coli in the Enfield Road water reservoir has been returned to Napier City Council. All other network testing remains clear.

However the Council is reassuring residents that the positive test is showing the very lowest e-coli reading detectable and that the source has been isolated to one tank of the two housed at the reservoir. "The reservoir is made up of two tanks – the largest of the two has returned consistently clear results however the smaller of the two has tested positive for e-coli," says Chris Dolley, Napier City Council's Manager Asset Strategy.

The small tank has now been shut off and will not be used for city water supply until further notice.

National water standards dictate that chlorination should continue until three negative tests are returned – so for the meantime, and throughout the long weekend, residents may continue to notice the smell or taste of chlorine. However for those who cannot tolerate chlorine, Council is installing a chlorine-free tap at Taradale Park. The installation should be complete by lunchtime tomorrow (Saturday).

An investigation into the source of the e-coli is also underway.

"Obviously we're very surprised by the outcome of the test, and we've shut down the tank while we discover the source," says Napier Mayor Bill Dalton.

As the small tank – which houses approximately a third of the Enfield Road reservoir's capacity – is now out of commission, Napier City is now moving to water restrictions. Hoses and sprinklers should be used 6-8am and 7-9pm only, and only every second day.

Addresses that are odd numbered should water on odd numbered calendar dates only.

Addresses that are even numbered should water on even numbered calendar days. "We are asking for a bit of support with this and hoping people will be understanding under these circumstances" says Mayor Dalton.

The Hawke's Bay DHB has confirmed that no boil water notice is required, as the e-coli reading is extremely low. There has been no increase in cases of reported illness, it says. However, if anyone is feeling sick with diarrhoea and/or vomiting they should see or call their health professional or call Healthline 0800 611 116.

Council staff are working through the weekend and updates will continue when available.

Daily testing is continuing. A full update on the weekend's e-coli sample test results will be available on Tuesday February 7th.

CHLORINATION FAQs

Why is it necessary to chlorinate the water?

Chlorine is a highly efficient disinfectant and helps kill harmful bacteria that may exist in the water or in the water supply pipes. It has been added as a precautionary measure to safeguard the water from potentially harmful bacteria and to ensure the water supply complies with the required drinking water standards.

Will chlorine affect my health?

Current studies indicate that using or drinking water with small amounts of chlorine does not cause harmful health effects. Its widespread use has been a major factor in reducing illness from waterborne diseases.

Even with the small volumes of chlorine used to some people will be able to taste it and some will notice the smell.

Please click on the link below regarding NZ drinking water standards -

- <http://www.health.govt.nz/publication/drinking-water-standards-new-zealand-2005-revised-2008>

Can chlorine affect existing conditions?

Yes, in a small number of people chlorine can be an irritant for an existing condition such as asthma or eczema. If you notice increased skin irritation, asthma symptoms or other symptoms – seek medical advice. You can contact Healthline 0800 611 116 or your family doctor (GP).

ENDS

For media enquiries contact:

Fiona Fraser

MANAGER COMMUNICATIONS & MARKETING

Napier City Council

t: +64 6 834 4144

m: 027 501 3921

e: fiona.fraser@napier.govt.nz

<image001.jpg>

This communication, including any attachments, is confidential. If you are not the intended recipient, please delete it. Thank you. Refer to the Electronic Transactions Act 2002.

<MEDIA RELEASE Chlorination to continue over long weekend.docx>