

Euan Kyle

From: Philip Matthews
Sent: Wednesday, 13 May 2020 7:51 AM
To: Euan Kyle
Subject: FW: LGOIMA Request

From: Contact
Sent: Tuesday, 12 May 2020 8:46 p.m.
To: Corporate Records
Subject: LGOIMA Request

Name [REDACTED]

Organisation

Address [REDACTED]

Telephone

Mobile [REDACTED]

Email [REDACTED]

Response By Email

Information requested All information related to the closure of the public artesian well taps during Covid-19 level 3 and 4, particularly with reference to what options were considered and explored to keep these available to the public. The information should include advice by third parties, memos, email, meeting minutes and note of telephone conversations.

File upload

Urgency

Reason

Invisible CAPTCHA 2020-05-12 20:41:45|

Euan Kyle

From: Euan Kyle
Sent: Wednesday, 13 May 2020 10:50 AM
To: [REDACTED]
Subject: RE: LGOIMA Request - Artesian wells

13/05/2020

Dear [REDACTED]

REQUEST FOR INFORMATION - LOCAL GOVERNMENT OFFICIAL INFORMATION AND MEETINGS ACT 1987: ACKNOWLEDGEMENT OF REQUEST

I am writing to acknowledge receipt of your official information request dated 12 May 2020 for information regarding the closure of the public artesian well taps during Covid-19 level 3 and 4.

We received your request on 13 May 2020. Given the current Covid-19 pandemic and the steps taken to mitigate it we will be endeavouring to respond to your request as soon as possible. However in some cases we may need to ask for an extension of the timeframe or further clarification to ensure we are responding efficiently and correctly. If this is the case we will keep in contact with you throughout the process and advise you of this.

If you have any queries, please feel free to contact me at euan.kyle@huttcity.govt.nz. If any additional factors come to light which are relevant to your request, please do not hesitate to contact us so that these can be taken into account.

Yours sincerely,

Euan Kyle

Senior Advisor, Official Information and Privacy

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6702 W www.huttcity.govt.nz

Euan Kyle

Senior Advisor, Official Information and Privacy

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6702, M 022 4155438, W www.huttcity.govt.nz



IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: Philip Matthews
Sent: Wednesday, 13 May 2020 7:51 AM
To: Euan Kyle
Subject: FW: LGOIMA Request

From: Contact
Sent: Tuesday, 12 May 2020 8:46 p.m.
To: Corporate Records
Subject: LGOIMA Request

Name [REDACTED]
Organisation
Address [REDACTED]
Telephone
Mobile [REDACTED]
Email [REDACTED]

Response By Email

Information requested All information related to the closure of the public artesian well taps during Covid-19 level 3 and 4, particularly with reference to what options were considered and explored to keep these available to the public. The information should include advice by third parties, memos, email, meeting minutes and note of telephone conversations.

File upload

Urgency Reason

Invisible CAPTCHA 2020-05-12 20:41:45|

Euan Kyle

From: Bruce Hodgins
Sent: Monday, 15 June 2020 2:35 PM
To: Jackie Sowry
Subject: FW: OIR -
Attachments: HCC Public Taps.pdf; Public Taps update.pdf; RE Artesian taps 1.pdf; RE Artesian taps 2.pdf; WHO-2019-nCoV-IPC_WASH-2020.2-eng (002).pdf; FW Dowse and Buick Taps Alert Level 3.pdf; FW Dowse and Buick Taps.pdf; FW FW Petition to turn on the Artesian fountains NOW. #4F07CM.PDF; Fwd Petition to turn on the Artesian fountains NOW..pdf; RE Artesian Taps 3.pdf; RE Closing public artesian well taps.pdf

From: Bruce Hodgins
Sent: Tuesday, 9 June 2020 3:45 PM
To: [REDACTED]
Subject: FW: OIR -

Hi [REDACTED]

Thanks for your request for information regarding the closure of the artesian water supply. Please find attached copies of emails between HCC, Wellington Water and Regional Public Health on this matter. I will send a second tranche of emails shortly due to their accumulated size. Happy to answer any questions you may have.

Bruce [REDACTED]

Euan Kyle

From: Bruce Hodgins
Sent: Monday, 15 June 2020 9:52 AM
To: Euan Kyle
Subject: FW: OIR -
Attachments: RE FW Petition to turn on the Artesian fountains NOW. #4F07CM.PDF; RE HCC Public Taps.pdf; RE Petition to turn on the Artesian fountains NOW. #4F07CM.PDF; RE Petition to turn on the Artesian fountains NOW..pdf; Re Public Taps update 1.pdf; Re Public Taps update 2.pdf; RE Dowse and Buick Taps Alert Level 3.pdf

From: Bruce Hodgins
Sent: Tuesday, 9 June 2020 3:48 PM
To: [REDACTED]
Subject: FW: OIR -

Here is the second lot.

Bruce

Bruce Hodgins
Strategic Advisor / Electoral Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6839, M 027 4820 461, W www.huttcity.govt.nz



Have your say
Draft Annual Plan 2020-2021



IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Friday, 24 April 2020 2:12 PM
To: Bruce Hodgins
Subject: FW: Dowse and Buick Taps Alert Level 3

Hi Bruce,
See below from RPH

From: Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>
Sent: Friday, 24 April 2020 1:58 PM
To: Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>; Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: RE: Dowse and Buick Taps Alert Level 3

Hi Gary

Thanks for your email. I have briefly consulted with Medical Officer of Health, Jill McKenzie this morning.

The public health direction is aligned with the requirements set by the New Zealand Government. Information for current and future Alert levels can be found at the website: <https://covid19.govt.nz/alert-system/covid-19-alert-system/>

At Alert level 3, the risk that community transmission might be happening is identified, public places are closed and gatherings of up to 10 people are allowed but only for weddings, funerals and tangihanga.

The community water taps are in a public place and therefore would be required to remain closed and this would be revisited at Alert level 2.

At Alert level 2, Gathering up to 500 outdoors are allowed and Public venues can open, but must comply with conditions on gatherings and undertake public health measures.

New Zealand moves from Alert level 4 to Alert level 3 next Monday at 11:59pm for two weeks (Review 11th May 2020).

If you have any further questions, please let me know.

Regards

Barbara Stevenson

Barbara Stevenson | Health Protection Officer | Drinking Water Assessor | Health Protection Team | Regional Public Health

Phone (04) 570 -9134
Mobile (027) 807 - 1402

www.rph.org.nz

Regional Public Health
HAUORA Ā IWĪ KI TE ŪPOKO O TE IKA A MĀUI
Better health for the greater Wellington region

Please consider the environment before printing this email and / or any related attachments

From: Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>
Sent: Thursday, 23 April 2020 12:20 PM
To: Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>
Cc: Mike Fisher [HVDHB] <Mike.Fisher@huttvalleydhb.org.nz>; Jill McKenzie [HVDHB] <Jill.McKenzie@huttvalleydhb.org.nz>; Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: FW: Dowse and Buick Taps

Hi Barbara

As discussed, with the proposed move from level 4 to level 3 lockdown Wellington Water has received a request from a Hutt City Councillor to reopen the public water taps at the Buick, Dowse and Riverside Dr bores. The risks of Covig spread identified leading to closure of the public taps at level 4 were potential tap contamination, congregation of people and the need to limit travel. These risks going into level 3 lockdown appear not to have changed. Can you please advise Public Health's direction on opening the public taps during level 3 lockdown.

Thanks
Gary

Gary O'Meara
Network Controller - Principal Advisor



Tel +64 4 912 4400 DDI 04 912 4435 Mob 027 434 8850

Private Bag 39804, Wellington Mail Centre 5045
Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz



Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Thursday, 23 April 2020 11:47 AM
To: Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>
Subject: FW: Dowse and Buick Taps

From: Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>
Sent: Wednesday, 25 March 2020 3:14 PM
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Cc: Mike Fisher [HVDHB] <Mike.Fisher@huttvalleydhb.org.nz>; Keith Lewis [HVDHB] <Keith.Lewis@huttvalleydhb.org.nz>
Subject: RE: Dowse and Buick Taps

Hi Nick

Thanks for your call regarding the proposed shutdown of the Dowse and Buick public water taps. In light of the COVID-19 pandemic, Public Health confers that access to the public water supply taps at Dowse and Buick must be disabled until further notice.

Regards

Barbara Stevenson | Health Protection Officer | Drinking Water Assessor | Health Protection Team | Regional Public Health

Phone (04) 570 -9134
Mobile (027) 807 - 1402
www.rph.org.nz



Please consider the environment before printing this email and / or any related attachments

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Wednesday, 25 March 2020 3:35 PM
To: Bruce Hodgins
Cc: Alexander VanPassen; Bianca Stables
Subject: FW: Dowse and Buick Taps

FYI Bruce

From: Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>
Sent: Wednesday, 25 March 2020 3:14 PM
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Cc: Mike Fisher [HVDHB] <Mike.Fisher@huttvalleydhb.org.nz>; Keith Lewis [HVDHB] <Keith.Lewis@huttvalleydhb.org.nz>
Subject: RE: Dowse and Buick Taps

Hi Nick

Thanks for your call regarding the proposed shutdown of the Dowse and Buick public water taps. In light of the COVID-19 pandemic, Public Health confers that access to the public water supply taps at Dowse and Buick must be disabled until further notice.

Regards

Barbara Stevenson | Health Protection Officer | Drinking Water Assessor | Health Protection Team | Regional Public Health

Phone (04) 570 -9134
Mobile (027) 807 - 1402

www.rph.org.nz



Please consider the environment before printing this email and / or any related attachments

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Friday, 8 May 2020 7:16 PM
To: Bruce Hodgins
Subject: FW: FW: Petition to turn on the Artesian fountains NOW. [#4F07CM]
Attachments: WHO-2019-nCoV-IPC_WASH-2020.2-eng (002).pdf

Hi Bruce,
Some sage advice in this document

From: Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>
Sent: Friday, 8 May 2020 4:44 PM
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: RE: FW: Petition to turn on the Artesian fountains NOW. [#4F07CM]

Hi Nick

There are concerns that the virus will persist on surfaces. Stainless steel taps are surfaces, which in a public water / or restroom setting are often moist environments and hence are a nice little place for viral particles to exist and not dry out in. I've attached a paper from WHO, I'm not sure if you have seen this. I sent it out to the Water suppliers at the end of March?

At the end of the day, the risk for community transmission must be made as low as practicable. I would ensure that the public were using a hand sanitiser too.

Cheers

Barbara Stevenson | Health Protection Officer | Drinking Water Assessor | Health Protection Team | Regional Public Health

Phone (04) 570 -9134
Mobile (027) 807 - 1402
www.rph.org.nz

Regional Public Health
HAUORA Ā IWI KI TE ŪPOKO • O TE IKA A MĀUI
Better health for the greater Wellington region

Please consider the environment before printing this email and / or any related attachments

e is appreciated.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.

If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.

If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Sunday, 10 May 2020 5:29 PM
To: Bruce Hodgins
Subject: Fwd: Petition to turn on the Artesian fountains NOW.
Attachments: signature.asc; ATT00001.htm

Hi Bruce,

I thought you and I were managing this but it looks like Tui has bypassed both of us and has gone straight to Colin

Nick Hewer-Hewitt
Manager - Network Performance

Sent from my iPhone

Begin forwarded message:

From: Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>
Date: 10 May 2020 at 16:41:48 NZST
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Cc: Paul Winstanley <Paul.Winstanley@wellingtonwater.co.nz>
Subject: Fwd: Petition to turn on the Artesian fountains NOW.

Hi

Can you please advise how soon from a decision from RPF we could recommission the Buick, Dowse & Waiwhetu public taps.

Thanks
Gary

Gary O'Meara
0274348850

Begin forwarded message:

From: Colin Crampton <Colin.Crampton@wellingtonwater.co.nz>
Date: 10 May 2020 at 12:35:52 PM NZST
To: Tui Lewis <Tui.Lewis@huttcity.govt.nz>, Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>
Cc: Jeremy McKibbin <Jeremy.McKibbin@wellingtonwater.co.nz>, Alexander van Paassen <Alexander.vanPaassen@wellingtonwater.co.nz>
Subject: Re: Petition to turn on the Artesian fountains NOW.

Hi Tui, we promised we would come back to you with a plan for covid_19 level 2. Gary O'Meara will look after this. Garry can you please explain to Tui how you see this progressing.

Thank you

Colin

Sent from my iPad

On 7/05/2020, at 1:41 PM, Tui Lewis <Tui.Lewis@huttcity.govt.nz> wrote:

Hi Colin,

Restless people out there :)

Cheers Tui

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

From: Daniel Reurich [REDACTED]

Sent: Thursday, 7 May 2020 1:39 PM

To: Contact <Contact@huttcity.govt.nz>

Subject: Petition to turn on the Artesian fountains NOW.

Hi,

I've started a petition to encourage the Hutt City Council to immediately restore the essential service the Artesian fountains provide. I'm aware that it is on the advice from Regional Public Health that the fountains were closed. However we who have signed the petition disagree with the decision and the view of RPH that people won't maintain reasonable social distancing and hygiene practises to mitigate the spread of Covid-19,

Therefore we the petitioners request that the council with all urgency consider our request and restore these vital services that so many of our residents rely on for pure unadulterated drinking water.

This petition can be found at
https://www.change.org/hutt_artesian_water

I will forward the signatures and comments to this petition when I can download them.

If you'd like to have a meeting, video conference or phone call to discuss this matter further, please let me know.

Kind regards,

Daniel Reurich.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Wednesday, 13 May 2020 12:23 PM
To: Jill.Mckenzie@huttvalleydhb.org.nz; Barbara Stevenson; Mike Fisher [HVDHB]
Cc: Bruce Hodgins; Gary O'Meara; Blair Dynan; Jeremy McKibbin
Subject: HCC Public Taps

Hi all,

Now that we are heading into Level 2 Covid-19 response, we (being HCC and WWL) are looking at reopening the public taps to the community. We are aware that even under Level 2 we are required to put in place processes and controls that will minimise the risks associated with close contact. Therefore we are proposing the following measures;

1. We will be opening the Dowse Gallery/Civic Centre taps only. The taps here are located about 10m apart, are close to the HCC offices for easier management and oversight, and have better parking than the other sites
2. The site will be staffed by HCC staff who will manage social distancing between people filling their containers, contact tracing, and disinfection of taps between users with a chlorine bleach solution.
3. The site will only be operating between first light and last light to allow better management of the site from Mon – Sat inclusive. The bore pump will be switched off outside of these hours.
4. HCC are looking at involving their Safe City team to provide a visible security presence onsite. Police will also be informed
5. Prior to the taps being reopened WWL will flush the bore and the pipe network supplying the taps, change the cartridge filters, ensure the UV unit is working properly, and arrange for some lab sampling of the water quality

We are seeking comment from RPH as to whether or not they are happy with what we propose and/or if they feel that there could be some other measures they would like us to consider.

At this stage we cannot confirm an opening date as HCC are still going through a process to identify staff to manage the above, as well as provide training so that the staff can operate safely, and that the risk of close contact is minimised.

Thanks

Nick Hewer-Hewitt
Manager – Network Performance
Network Management Group



Tel 04 912 4400 DDI +64 4 912 4415 Mob +64 27 434 8839
Private Bag 39804, Wellington Mail Centre 5045
Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt 5012
www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council, and Greater Wellington Regional Council.
We manage their drinking water, wastewater and stormwater services.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Wednesday, 20 May 2020 9:52 AM
To: Blair Dynan
Cc: Bruce Hodgins
Subject: Public Taps update

Hi Blair,

It looks like RPH have given their approval to open the taps completely, albeit with increased signage and footpath marking (which HCC will arrange). At this stage we are looking at going live on Sat.

Can you please arrange with your team to get the Buick St bore flushed and Filtec to change the cartridges, ideally by Thurs? this will enable me time to arrange for Eurofins to take a sample on Thurs so we can get a result on Fri.

With regards to the Waiwhetu Marae, I will need to arrange and coordinate this separately as we don't have a key for the site yet, and the infrastructure is privately owned but managed and maintained by HCC (us). Once I have been given the nod by HCC and have the name for a contact person there, I will let you know our next steps.

Can I please asked that I be kept informed of progress and any issues so that nothing is a surprise? ☺

In terms of the rest of this week, we will continue with the Dowse plan as agreed.

Many thanks Blair for your help

Nick Hewer-Hewitt
Manager – Network Performance
Network Management Group



Tel 04 912 4400 DDI +64 4 912 4415 Mob +64 27 434 8839
Private Bag 39804, Wellington Mail Centre 5045
Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt 5012
www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council, and Greater Wellington Regional Council.
We manage their drinking water, wastewater and stormwater services.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Wednesday, 20 May 2020 3:03 PM
To: Bruce Hodgins
Subject: RE: Artesian taps

Great news Bruce, I am happy that common sense prevailed.

I will ensure that everything is ready for whenever you want to turn the taps on (are we still looking at Sat for Buick).

I will also let you know how I get on with Wirangi.

Thanks Bruce

From: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Sent: Wednesday, 20 May 2020 2:48 PM
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: FW: Artesian taps

Hi Nick. I have essentially been given the all clear on this. Just getting some signs made and will put something in writing to Jill to outline what we are doing.

I haven't been able to get hold of Wirangi but have left him a message that you would be in touch.

His contact details are:

wluke@atiawa.com
027 446 4150

Happy for the opening to be progressive with this one coming on last. We just need a timetable that we can safely work to and communicate to the public.

Bruce

Bruce Hodgins

Strategic Advisor / Electoral Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6839, M 027 4820 461, W www.huttcity.govt.nz



Have your say
Draft Annual Plan 2020-2021



IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: Andrea Blackshaw
Sent: Wednesday, 20 May 2020 12:02 PM

To: Bruce Hodgins
Cc: Jo Miller; Caryn Ellis
Subject: RE: Artesian taps

Hi Bruce

This sounds like a good approach (especially given the challenges we are having of managing public demand and resourcing contact tracing at the taps). Will RPH still want to sign off on a plan, or does that conversation cover this? If that is RPH covered off then I am happy to proceed. We could bolster the plan further by installing a 'do it yourself' QR code at all taps in the very near future for people to scan with a contact tracing ap – this would mean at least some ongoing contact tracing at the taps.

We will need to manage the reopening carefully with Wgtn Water on this. So can you agree a plan with them on each set of taps (when cleaned, when on, when can people start to get water) and then we can think about how we communicate.

Ngā mihi nui

Andrea

From: Bruce Hodgins
Sent: Wednesday, 20 May 2020 10:14 AM
To: Andrea Blackshaw
Cc: Jo Miller; Caryn Ellis
Subject: Artesian taps

Hi Andrea

This morning I have spoken to Jill McKenzie the Medical Officer of Health for this area about relaxing the measures we have put in place for the artesian taps.

I suggested that we would cease the manned approach by the end of the week or early next week and replace with appropriate signage regarding social distancing and hand hygiene for the users, along with regular (daily) cleaning of the taps and surfaces.

I pointed out that we had re-opened playgrounds with just signage and that parking meters had no Council imposed controls.

I also pointed out that the shortened time controls we are putting in place at the moment for the taps are having the unintended consequence of gathering people together in a larger number than would normally occur.

In talking to Lauren yesterday she advises that staffing will likely change on a daily basis. The two young women scheduled on yesterday (Alice and Angel) did a great job.

Jill was open to the idea and advised that in the end it was our decision to make having regard to the general advice provided for level 2 and feedback from Regional Public Health.

I intend to implement these changes and arrange for all taps to be opened unless you have a contrary view.

Bruce

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Wednesday, 20 May 2020 4:59 PM
To: Bruce Hodgins
Cc: Caryn Ellis; wluke@atiawa.com
Subject: RE: Artesian taps

Hi Bruce,

I have just spoken with Wirangi, he is all good with what we have proposed. He will touch base with you tomorrow to coordinate the various moving parts.

All looking good 😊

Thanks Bruce

Nick Hewer-Hewitt
Manager – Network Performance
Network Management Group



Tel 04 912 4400 DDI +64 4 912 4415 Mob +64 27 434 8839
Private Bag 39804, Wellington Mail Centre 5045
Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt 5012
www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council, and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

From: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Sent: Wednesday, 20 May 2020 2:48 PM
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: FW: Artesian taps

Hi Nick. I have essentially been given the all clear on this. Just getting some signs made and will put something in writing to Jill to outline what we are doing.

I haven't been able to get hold of Wirangi but have left him a message that you would be in touch.

His contact details are:
wluke@atiawa.com
027 446 4150

Happy for the opening to be progressive with this one coming on last. We just need a timetable that we can safely work to and communicate to the public.

Bruce

Bruce Hodgins

Strategic Advisor / Electoral Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6839, M 027 4820 461, W www.huttcity.govt.nz



Have your say
Draft Annual Plan 2020-2021



IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: Andrea Blackshaw
Sent: Wednesday, 20 May 2020 12:02 PM
To: Bruce Hodgins
Cc: Jo Miller; Caryn Ellis
Subject: RE: Artesian taps

Hi Bruce

This sounds like a good approach (especially given the challenges we are having of managing public demand and resourcing contact tracing at the taps). Will RPH still want to sign off on a plan, or does that conversation cover this? If that is RPH covered off then I am happy to proceed. We could bolster the plan further by installing a 'do it yourself' QR code at all taps in the very near future for people to scan with a contact tracing app – this would mean at least some ongoing contact tracing at the taps.

We will need to manage the reopening carefully with Wgtn Water on this. So can you agree a plan with them on each set of taps (when cleaned, when on, when can people start to get water) and then we can think about how we communicate.

Ngā mihi nui

Andrea

From: Bruce Hodgins
Sent: Wednesday, 20 May 2020 10:14 AM
To: Andrea Blackshaw
Cc: Jo Miller; Caryn Ellis
Subject: Artesian taps

Hi Andrea

This morning I have spoken to Jill McKenzie the Medical Officer of Health for this area about relaxing the measures we have put in place for the artesian taps.

I suggested that we would cease the manned approach by the end of the week or early next week and replace with appropriate signage regarding social distancing and hand hygiene for the users, along with regular (daily) cleaning of the taps and surfaces.

I pointed out that we had re-opened playgrounds with just signage and that parking meters had no Council imposed controls.

I also pointed out that the shortened time controls we are putting in place at the moment for the taps are having the unintended consequence of gathering people together in a larger number than would normally occur.

In talking to Lauren yesterday she advises that staffing will likely change on a daily basis. The two young women scheduled on yesterday (Alice and Angel) did a great job.

Jill was open to the idea and advised that in the end it was our decision to make having regard to the general advice provided for level 2 and feedback from Regional Public Health.

I intend to implement these changes and arrange for all taps to be opened unless you have a contrary view.

Bruce

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Jill.Mckenzie@huttvalleydhb.org.nz
Sent: Wednesday, 20 May 2020 4:17 PM
To: Bruce Hodgins
Cc: Health Protection [HVDHB]; Nick Hewer-Hewitt
Subject: RE: Artesian Taps

Thanks Bruce for providing the proposed revised plan. This appears to be a pragmatic way forward. One additional suggestion is that there are some "spot checks" by council staff targeted at any known busier periods of use to provide additional reassurance that users are observing the advice such as physical distancing. I've copied in the best 'single point of contact email' for any further queries you may have going forward.

Ngā mihi,
Jill

Dr Jill McKenzie | Medical Officer of Health | Medical Team | Regional Public Health

Phone (04) 570 9735
Mobile (027) 563 2121
www.rph.org.nz

Regional Public Health
HAUORA Ā IWĪ KI TE ŪPOKO O TE IKA A MĀUI
Better health for the greater Wellington region



From: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Sent: Wednesday, 20 May 2020 3:37 PM
To: Jill McKenzie [HVDHB] <Jill.McKenzie@huttvalleydhb.org.nz>
Subject: Artesian Taps

Thanks Jill for your feedback from this morning.

As discussed we have reviewed the measures we have implemented for the partial re-opening of the Dowse artesian water taps and consider that these measures are in fact creating unintended consequences (a large number of people gathering at one time), which need to be addressed.

We have decided that we will reopen all three water supplies on a permanent basis (Dowse, Buick Street and Waiwhetu), as soon as we have undertaken the flushing and testing of each site and have the following two measures in place.

1. Erect signage at each site which includes the central messaging we are using for playgrounds and other public sites. Copy below
2. Initiate daily cleaning of the taps and surfaces by a commercial cleaning company

THIS ARTESIAN WATER SUPPLY IS NOW OPEN

To protect yourself and others from COVID-19 please ensure you keep your distance from others and wash your hands as soon as possible after use of the taps.

Thank you

Wash and dry your hands before and after using the taps.

If you can't wash your hands use sanitizer.

Cough or sneeze into your elbow.

Don't touch your eyes, nose or mouth.

Don't use the taps and stay home if you feel unwell.

Stay 2 metres away from people you don't know or can't contact trace.

Unite against COVID-19

For further information
[huttcity.govt.nz](https://www.huttcity.govt.nz)
contact@huttcity.govt.nz
 Call +64 4 570 6666 / 0800 HUTT CITY

For further details on Covid-19 visit covid19.govt.nz

HUTT CITY
 TE ARIKI KĀHIRANGA

Coreflute - 12 of 600x400mm (H)

In addition we are looking at installing a 'do it yourself' QR code at all taps in the very near future for people to scan with a contact tracing app – this would mean at least some ongoing contact tracing at the taps.

Regards

Bruce

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Wednesday, 25 March 2020 5:24 PM
To: Caryn Ellis; Alexander VanPassen; Wirangi Luke; Samantha McCluskey
Cc: Bruce Hodgins
Subject: RE: Closing public artesian well taps

The logos at the bottom should be WWL and HCC...not WCC

From: Caryn Ellis <Caryn.Ellis@huttcity.govt.nz>
Sent: Wednesday, 25 March 2020 5:15 PM
To: Alexander van Paassen <Alexander.vanPaassen@wellingtonwater.co.nz>; Wirangi Luke <wluke@atiawa.com>; Samantha McCluskey <Samantha.McCluskey@wellingtonwater.co.nz>
Cc: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>; Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: RE: Closing public artesian well taps

I'll get back to you in a minute – had started a draft so will merge the two.

From: Alexander van Paassen [mailto:Alexander.vanPaassen@wellingtonwater.co.nz]
Sent: Wednesday, 25 March 2020 5:12 PM
To: Wirangi Luke; Samantha McCluskey; Caryn Ellis
Cc: Bruce Hodgins; Nick Hewer-Hewitt
Subject: RE: Closing public artesian well taps

Starter for signs (sorry got sidetracked on a work call)

Public artesian well taps closed till further notice

This public facility is closed due the risk of community transmission of Covid-19

Your drinking water from your tap remains perfectly safe.

As a public facility we are unable to control physical distancing and the sanitisation of surfaces such as tap buttons and outlets. Because of these risks, Council and Wellington Water on the advice of Regional Public Health have made the decision to close the public artesian well taps at the Buick St fountain, the Laings Road at the Dowse and [marae address]

This closure remains in effect until further notice.

WCC – HCC logos

Alex van Paassen
027 232 1677

From: Wirangi Luke <wluke@atiawa.com>
Sent: Wednesday, 25 March 2020 4:28 PM
To: Alexander van Paassen <Alexander.vanPaassen@wellingtonwater.co.nz>; Samantha McCluskey <Samantha.McCluskey@wellingtonwater.co.nz>; Caryn Ellis <Caryn.Ellis@huttcity.govt.nz>

Cc: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Subject: Re: Closing public artesian well taps

Send it to kura@atiawa.com

Get [Outlook for Android](#)

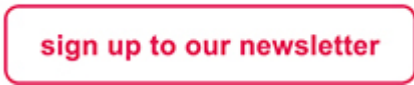
From: Caryn Ellis <Caryn.Ellis@huttcity.govt.nz>
Sent: Wednesday, March 25, 2020 4:18:13 PM
To: Wirangi Luke <wluke@atiawa.com>; Alexander VanPassen <Alexander.vanPaassen@wellingtonwater.co.nz>; Samantha McCluskey <Samantha.McCluskey@wellingtonwater.co.nz>
Cc: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Subject: Closing public artesian well taps

Kia ora, just connecting everyone on this. WW will produce some messages and signs and we will look to do some social media and possibly a press release following the closure. Wirangi – do you have someone who could translate the signs into Te Reo urgently for us please?

Regards Caryn

Caryn Ellis
Senior Communications Advisor - Media

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T , M 0272385894, W www.huttcity.govt.nz



IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Friday, 24 April 2020 2:35 PM
To: Bruce Hodgins
Subject: RE: Dowse and Buick Taps Alert Level 3

Hi Bruce,
Good question. I guess it is a bit early to tell just yet given we don't know what Level 2 looks like.

A week out from entering Level 3, the government gave us all a heads up on what Level 3 would look like. I would imagine that we would get something like that next week or even the week after as we near the end of Level 3.

I would suggest that when we understand what we can or can't do with Level 2, you Gary and I have a chat about Level 2 and the public taps, come up with a cunning plan, and bounce the plan by RPH for their endorsement.

How does that sound?

From: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Sent: Friday, 24 April 2020 2:18 PM
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: RE: Dowse and Buick Taps Alert Level 3

Thanks Nick.

In anticipation of opening for Level 2 what sort of actions do you think we will need to take to meet the public health measures referred to by Barbara below.

Bruce

Bruce Hodgins

Strategic Advisor / Electoral Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6839, M 027 4820 461, W www.huttcity.govt.nz



sign up to our newsletter

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: Nick Hewer-Hewitt [mailto:Nick.Hewer-Hewitt@wellingtonwater.co.nz]
Sent: Friday, 24 April 2020 2:12 PM
To: Bruce Hodgins
Subject: FW: Dowse and Buick Taps Alert Level 3

Hi Bruce,

See below from RPH

From: Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>
Sent: Friday, 24 April 2020 1:58 PM
To: Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>; Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: RE: Dowse and Buick Taps Alert Level 3

Hi Gary

Thanks for your email. I have briefly consulted with Medical Officer of Health, Jill McKenzie this morning.

The public health direction is aligned with the requirements set by the New Zealand Government. Information for current and future Alert levels can be found at the website: <https://covid19.govt.nz/alert-system/covid-19-alert-system/>

At Alert level 3, the risk that community transmission might be happening is identified, public places are closed and gatherings of up to 10 people are allowed but only for weddings, funerals and tangihanga.

The community water taps are in a public place and therefore would be required to remain closed and this would be revisited at Alert level 2.

At Alert level 2, Gathering up to 500 outdoors are allowed and Public venues can open, **but must comply with conditions on gatherings and undertake public health measures.**

New Zealand moves from Alert level 4 to Alert level 3 next Monday at 11:59pm for two weeks (Review 11th May 2020).

If you have any further questions, please let me know.

Regards

Barbara Stevenson

Barbara Stevenson | Health Protection Officer | Drinking Water Assessor | Health Protection Team | Regional Public Health

Phone (04) 570 -9134
Mobile (027) 807 - 1402

www.rph.org.nz

Regional Public Health
HAUORA Ā IWĪ KI TE ŪPOKO • O TE IKA A MĀUI
Better health for the greater Wellington region

Please consider the environment before printing this email and / or any related attachments

From: Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>
Sent: Thursday, 23 April 2020 12:20 PM
To: Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>
Cc: Mike Fisher [HVDHB] <Mike.Fisher@huttvalleydhb.org.nz>; Jill McKenzie [HVDHB] <Jill.McKenzie@huttvalleydhb.org.nz>; Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: FW: Dowse and Buick Taps

Hi Barbara

As discussed, with the proposed move from level 4 to level 3 lockdown Wellington Water has received a request from a Hutt City Councillor to reopen the public water taps at the Buick, Dowse and Riverside Dr bores. The risks of Covid spread identified leading to closure of the public taps at level 4 were potential tap contamination, congregation of people and the need to limit travel. These risks going into level 3 lockdown appear not to have changed. Can you please advise Public Health's direction on opening the public taps during level 3 lockdown.

Thanks
Gary

Gary O'Meara
Network Controller - Principal Advisor



Tel +64 4 912 4400 DDI 04 912 4435 Mob 027 434 8850

Private Bag 39804, Wellington Mail Centre 5045
Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz



Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council and Greater Wellington Regional Council. We manage their drinking water, wastewater and stormwater services.

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Thursday, 23 April 2020 11:47 AM
To: Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>
Subject: FW: Dowse and Buick Taps

From: Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>
Sent: Wednesday, 25 March 2020 3:14 PM
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Cc: Mike Fisher [HVDHB] <Mike.Fisher@huttvalleydhb.org.nz>; Keith Lewis [HVDHB] <Keith.Lewis@huttvalleydhb.org.nz>
Subject: RE: Dowse and Buick Taps

Hi Nick

Thanks for your call regarding the proposed shutdown of the Dowse and Buick public water taps. In light of the COVID-19 pandemic, Public Health confers that access to the public water supply taps at Dowse and Buick must be disabled until further notice.

Regards

Barbara Stevenson | Health Protection Officer | Drinking Water Assessor | Health Protection Team | Regional Public Health

Phone (04) 570 -9134
Mobile (027) 807 - 1402

www.rph.org.nz



Please consider the environment before printing this email and / or any related attachments

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Friday, 8 May 2020 4:45 PM
To: Bruce Hodgins
Cc: Kevin Locke
Subject: RE: FW: Petition to turn on the Artesian fountains NOW. [#4F07CM]

Hi Bruce,
Ultimately the decision is HCC 😊

Conceptually the highlighted text might work. I guess the issues would be

- Keeping the bores shutdown while people collect the pre-filled bottles, otherwise how do we stop them still using the taps. This in itself will cause angst.
- You may still need to have staff there to police rationing of the filled bottles, remembering that people go there to fill all sorts of quantities and whatever HCC provide/person may not be enough
- I think that a “small cost” will cause you more PR issues
- The area I have highlighted in green may work, but you will still need to shut it down overnight, police social distancing, tap disinfection, contact tracing, and get RPH sign off. I would suggest Buick St isnt the right location for this option as the taps are too close together. Dowse would be the logical choice as the three sets of taps are a good distance apart

Andrea’s comments below don’t address Daniel’s request to open the taps now...which I think we are all in agreement with that we shouldn’t while we are at level 3. This is consistent with advice from our public health experts i.e. RPH’s Medical Officer of Health.

Barbara Stevenson raised a good point today when I briefly discussed this with her. Daniel raises the point around how many C19 cases are in the Hutt Valley. This is largely irrelevant as people come from all over the region for that water, and while the Hutt Valley may not have any cases, Wellington and Kapiti do

Thanks

From: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Sent: Friday, 8 May 2020 2:56 PM
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: FW: FW: Petition to turn on the Artesian fountains NOW. [#4F07CM]

Hi Nick. What do you think about this idea?

From: Andrea Blackshaw
Sent: Friday, 8 May 2020 2:44 PM
To: Bruce Hodgins
Subject: RE: FW: Petition to turn on the Artesian fountains NOW. [#4F07CM]

Hi Bruce – just talked to Jo and Jarrad re this and Mayor’s expectation. He thinks Mayor would be comfortable with **us opening just one for a limited time Mon-Sat in Level 2**. Jo suggested the Runanga might be able to open the one at Waiwhetu and man that themselves – thoughts?

I also wondered about whether it might be worth us bottling it ourselves and letting people pick it up. Might be more efficient so we don’t have to clean every time, and might not mean having to have people there when no one wants to use them (might even avoid contact tracing?) – ie: pick up water rather than bottle your own, small cost for bottles, but potentially less staff time involved – just something else to think about 😊

AB

From: Bruce Hodgins
Sent: Friday, 8 May 2020 2:27 PM
To: Caryn Ellis; Jarred Griffiths; Andrea Blackshaw
Cc: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz> (Nick.Hewer-Hewitt@wellingtonwater.co.nz)
Subject: FW: FW: Petition to turn on the Artesian fountains NOW. [#4F07CM]

Fyi below.

I do not intend to get into a debate with Daniel and so will not respond.

The advice that WWL has had from RPH is clear and we must abide by it.

Bruce

From: Daniel Reurich [mailto:████████████████████]
Sent: Friday, 8 May 2020 1:08 PM
To: Bruce Hodgins
Subject: Re: FW: Petition to turn on the Artesian fountains NOW. [#4F07CM]

Hi Bruce,

Frankly that's not good enough.

Functionally with respect to the taps there is nothing stopping them from being opened under your specified terms now.

Furthermore RPH have no credible evidence to suggest there is any measurable risk of transmission of Covid-19 from the taps even if there was no cleaning or enforced social distancing applied. It is time to put an end to this stupidity and simply turn all the taps back on.

This is obvious given the fact that everybody that is a known case or probable case and those with them are required to remain in isolation until they are considered recovered, and that the active case rate is so low now. There are ~ 130 active cases across the country. How many are in Hutt Valley?

What is the actual risk of transmission via the artesian fountains with no mitigations? Unless the RPH can't prove a credible risk then the decision must immediately be made to restore this vital community service.

Regards,
Daniel.

On 08/05/20 11:40, Bruce Hodgins wrote:

Thanks Daniel for your email regarding the artesian water supply taps.

With the likelihood of the country moving to Level 2 in the next week or so, Wellington Water is preparing a plan that would enable us to reopen an artesian water facility. (Please note that we will not be re-opening the taps during Level 3).

We have been advised that to do this at Level 2 we will need to manage social distancing, maintain a record of persons using the taps for tracing purposes and disinfect the taps between users.

This will require Council to have staff on duty at any artesian facility that we open.

We will be looking to do this on a reduced scale, (likely shortened hours and only one site) in order to effectively manage the operation.

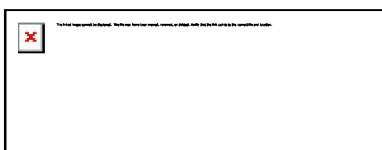
We will publish the details for the re-opening of an artesian water supply on the Council website once we have worked out all the details.

Bruce

Bruce Hodgins

Strategic Advisor / Electoral Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6839, M 027 4820 461, W www.huttcity.govt.nz



IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

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

From: "Daniel Reurich" [REDACTED]
Sent: Thursday, 7 May 2020 1:38 PM
To: "contact@huttcity.govt.nz" <contact@huttcity.govt.nz>
Subject: Petition to turn on the Artesian fountains NOW.

Hi,

I've started a petition to encourage the Hutt City Council to immediately restore the essential service the Artesian fountains provide. I'm aware that it is on the advice from Regional Public Health that the fountains were closed. However we who have signed the petition disagree with the decision and the view of RPH that people won't maintain reasonable social distancing and hygiene practises to mitigate the spread of Covid-19,

Therefore we the petitioners request that the council with all urgency consider our request and restore these vital services that so many of our residents rely on for pure unadulterated drinking water.

This petition can be found at https://www.change.org/hutt_artesian_water

I will forward the signatures and comments to this petition when I can download them.

If you'd like to have a meeting, video conference or phone call to discuss this matter further, please let me know.

Kind regards,

Daniel Reurich.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>
Sent: Wednesday, 13 May 2020 2:56 PM
To: 'Nick Hewer-Hewitt'; Jill.Mckenzie@huttvalleydhb.org.nz; Mike Fisher [HVDHB]
Cc: Bruce Hodgins; Gary O'Meara; Blair Dynan; Jeremy McKibbin
Subject: RE: HCC Public Taps

Hi Nick

Regional Public Health agree with the proposed measures for the reopening of the public taps at Dowse Gallery/Civic centre. Please keep us updated if there are any issues going forward.

Regards

Barbara Stevenson | Health Protection Officer | Drinking Water Assessor | Health Protection Team | Regional Public Health

Phone (04) 570 -9134
Mobile (027) 807 - 1402

www.rph.org.nz



Please consider the environment before printing this email and / or any related attachments

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Wednesday, 13 May 2020 12:23 PM
To: Jill McKenzie [HVDHB] <Jill.McKenzie@huttvalleydhb.org.nz>; Barbara Stevenson [HVDHB] <Barbara.Stevenson@huttvalleydhb.org.nz>; Mike Fisher [HVDHB] <Mike.Fisher@huttvalleydhb.org.nz>
Cc: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>; Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>; Blair Dynan <Blair.Dynan@wellingtonwater.co.nz>; Jeremy McKibbin <Jeremy.McKibbin@wellingtonwater.co.nz>
Subject: HCC Public Taps

Hi all,

Now that we are heading into Level 2 Covid-19 response, we (being HCC and WWL) are looking at reopening the public taps to the community. We are aware that even under Level 2 we are required to put in place processes and controls that will minimise the risks associated with close contact. Therefore we are proposing the following measures;

1. We will be opening the Dowse Gallery/Civic Centre taps only. The taps here are located about 10m apart, are close to the HCC offices for easier management and oversight, and have better parking than the other sites
2. The site will be staffed by HCC staff who will manage social distancing between people filling their containers, contact tracing, and disinfection of taps between users with a chlorine bleach solution.
3. The site will only be operating between first light and last light to allow better management of the site from Mon – Sat inclusive. The bore pump will be switched off outside of these hours.
4. HCC are looking at involving their Safe City team to provide a visible security presence onsite. Police will also be informed
5. Prior to the taps being reopened WWL will flush the bore and the pipe network supplying the taps, change the cartridge filters, ensure the UV unit is working properly, and arrange for some lab sampling of the water quality

We are seeking comment from RPH as to whether or not they are happy with what we propose and/or if they feel that there could be some other measures they would like us to consider.

At this stage we cannot confirm an opening date as HCC are still going through a process to identify staff to manage the above, as well as provide training so that the staff can operate safely, and that the risk of close contact is minimised.

Thanks

Nick Hewer-Hewitt
Manager – Network Performance
Network Management Group



Tel 04 912 4400 DDI +64 4 912 4415 Mob +64 27 434 8839
Private Bag 39804, Wellington Mail Centre 5045
Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt 5012
www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council, and Greater Wellington Regional Council.
We manage their drinking water, wastewater and stormwater services.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Friday, 8 May 2020 3:56 PM
To: Bruce Hodgins
Cc: Kevin Locke
Subject: RE: Petition to turn on the Artesian fountains NOW. [#4F07CM]

Hi Bruce

Just to clarify? WWL and HCC will jointly prepare a Plan, which will need to be agreed with RPH. We cannot prepare it ourselves without understanding where the resources (i.e HCC staff to man the sites, manage contact tracing registers, and oversee disinfecting the taps) are going to come from. Also what sort of operating philosophy we want to implement e.g operating hours during the day, and if the taps are going to be open over the weekend.

I hope that makes sense, the wording below implies that WWL are the enablers to reopen the taps, whereas it is a joint effort from both of us with support from RPH.

Thanks

From: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Sent: Friday, 8 May 2020 11:40 AM
To: [REDACTED]
Cc: Caryn Ellis <Caryn.Ellis@huttcity.govt.nz>; Gavin Bird <Gavin.Bird@huttcity.govt.nz>; Andrea Blackshaw <Andrea.Blackshaw@huttcity.govt.nz>; Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: FW: Petition to turn on the Artesian fountains NOW. [#4F07CM]

Thanks Daniel for your email regarding the artesian water supply taps.

With the likelihood of the country moving to Level 2 in the next week or so, Wellington Water is preparing a plan that would enable us to reopen an artesian water facility. (Please note that we will not be re-opening the taps during Level 3).

We have been advised that to do this at Level 2 we will need to manage social distancing, maintain a record of persons using the taps for tracing purposes and disinfect the taps between users.

This will require Council to have staff on duty at any artesian facility that we open.

We will be looking to do this on a reduced scale, (likely shortened hours and only one site) in order to effectively manage the operation.

We will publish the details for the re-opening of an artesian water supply on the Council website once we have worked out all the details.

Bruce

Bruce Hodgins

Strategic Advisor / Electoral Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6839, M 027 4820 461, W www.huttcity.govt.nz



sign up to our newsletter

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

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

From: "Daniel Reurich" [REDACTED]
Sent: Thursday, 7 May 2020 1:38 PM
To: "contact@huttcity.govt.nz" <contact@huttcity.govt.nz>
Subject: Petition to turn on the Artesian fountains NOW.

Hi,

I've started a petition to encourage the Hutt City Council to immediately restore the essential service the Artesian fountains provide. I'm aware that it is on the advice from Regional Public Health that the fountains were closed. However we who have signed the petition disagree with the decision and the view of RPH that people won't maintain reasonable social distancing and hygiene practises to mitigate the spread of Covid-19,

Therefore we the petitioners request that the council with all urgency consider our request and restore these vital services that so many of our residents rely on for pure unadulterated drinking water.

This petition can be found at https://www.change.org/hutt_artesian_water

I will forward the signatures and comments to this petition when I can download them.

If you'd like to have a meeting, video conference or phone call to discuss this matter further, please let me know.

Kind regards,

Daniel Reurich.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.

If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.

If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Monday, 11 May 2020 8:53 AM
To: Bruce Hodgins
Subject: RE: Petition to turn on the Artesian fountains NOW.

Thanks Bruce.

Once we have a decision from the government about Level 2. I will touch base with you to confirm our plan so that I can bounce it by RPH.

Also, there are some activities that WWL will have to do to get the bores ready i.e. give the bores themselves a good flush as they have been static for 7 weeks, we may also need to change the cartridge filters as they may have stuff growing on them due to know water flow. I also need to make sure our sparkies are aware of the timings to turn the pump on and off.

From: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Sent: Monday, 11 May 2020 8:43 AM
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Subject: RE: Petition to turn on the Artesian fountains NOW.

Thanks Nick. Yes we are. I will call Tui.

Bruce Hodgins

Strategic Advisor / Electoral Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6839, M 027 4820 461, W www.huttcity.govt.nz



sign up to our newsletter

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: Nick Hewer-Hewitt [mailto:Nick.Hewer-Hewitt@wellingtonwater.co.nz]
Sent: Sunday, 10 May 2020 5:29 PM
To: Bruce Hodgins
Subject: Fwd: Petition to turn on the Artesian fountains NOW.

Hi Bruce,

I thought you and I were managing this but it looks like Tui has bypassed both of us and has gone straight to Colin

Nick Hewer-Hewitt
Manager - Network Performance

Sent from my iPhone

Begin forwarded message:

From: Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>
Date: 10 May 2020 at 16:41:48 NZST
To: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Cc: Paul Winstanley <Paul.Winstanley@wellingtonwater.co.nz>
Subject: Fwd: Petition to turn on the Artesian fountains NOW.

Hi

Can you please advise how soon from a decision from RPF we could recommission the Buick, Dowse & Waiwhetu public taps.

Thanks

Gary

Gary O'Meara
0274348850

Begin forwarded message:

From: Colin Crampton <Colin.Crampton@wellingtonwater.co.nz>
Date: 10 May 2020 at 12:35:52 PM NZST
To: Tui Lewis <Tui.Lewis@huttcity.govt.nz>, Gary O'Meara <Gary.O'Meara@wellingtonwater.co.nz>
Cc: Jeremy McKibbin <Jeremy.McKibbin@wellingtonwater.co.nz>, Alexander van Paassen <Alexander.vanPaassen@wellingtonwater.co.nz>
Subject: Re: Petition to turn on the Artesian fountains NOW.

Hi Tui, we promised we would come back to you with a plan for covid_19 level 2. Gary O'Meara will look after this. Garry can you please explain to Tui how you see this progressing.

Thank you

Colin

Sent from my iPad

On 7/05/2020, at 1:41 PM, Tui Lewis <Tui.Lewis@huttcity.govt.nz> wrote:

Hi Colin,

Restless people out there :)

Cheers Tui

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

From: Daniel Reurich [REDACTED]
Sent: Thursday, 7 May 2020 1:39 PM
To: Contact <Contact@huttcity.govt.nz>
Subject: Petition to turn on the Artesian fountains NOW.

Hi,

I've started a petition to encourage the Hutt City Council to immediately restore the essential service the Artesian fountains provide. I'm aware that it is on the advice from Regional Public Health that the fountains were closed. However we who have signed the petition disagree with the decision and the view of RPH that people won't maintain reasonable social distancing and hygiene practises to mitigate the spread of Covid-19,

Therefore we the petitioners request that the council with all urgency consider our request and restore these vital services that so many of our residents rely on for pure unadulterated drinking water.

This petition can be found at
https://www.change.org/hutt_arteresian_water

I will forward the signatures and comments to this petition when I can download them.

If you'd like to have a meeting, video conference or phone call to discuss this matter further, please let me know.

Kind regards,

Daniel Reurich.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Thursday, 21 May 2020 7:59 AM
To: Blair Dynan
Cc: Bruce Hodgins
Subject: Re: Public Taps update

Thanks Blair,

I will be in touch about the Marae bore once we have confirmed details with the Marae staff and get access to a key

Nick Hewer-Hewitt
Manager - Network Performance

Sent from my iPhone

On 21/05/2020, at 07:50, Blair Dynan <Blair.Dynan@wellingtonwater.co.nz> wrote:

Hi Nick,

We have flushed the Buick st bore yesterday, Filtec will be onsite Friday morning to inspect the filters and replace them if required.

Cheers

Blair Dynan Team Leader, Utilities North

<image001.jpg>

Phone 021 587 225
Private Bag 39804, Wellington Mail Centre 5045
Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt
www.wellingtonwater.co.nz

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Wednesday, 20 May 2020 9:52 AM
To: Blair Dynan <Blair.Dynan@wellingtonwater.co.nz>
Cc: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>
Subject: Public Taps update

Hi Blair,

It looks like RPH have given their approval to open the taps completely, albeit with increased signage and footpath marking (which HCC will arrange). At this stage we are looking at going live on Sat.

Can you please arrange with your team to get the Buick St bore flushed and Filtec to change the cartridges, ideally by Thurs? this will enable me time to arrange for Eurofins to take a sample on Thurs so we can get a result on Fri.

With regards to the Waiwhetu Marae, I will need to arrange and coordinate this separately as we don't have a key for the site yet, and the infrastructure is privately owned but managed and maintained by HCC (us). Once I have been given the nod by HCC and have the name for a contact person there, I will let you know our next steps.

Can I please asked that I be kept informed of progress and any issues so that nothing is a surprise?
☺

In terms of the rest of this week, we will continue with the Dowse plan as agreed.

Many thanks Blair for your help

Nick Hewer-Hewitt
Manager – Network Performance
Network Management Group

<image001.jpg>

Tel 04 912 4400 DDI +64 4 912 4415 Mob +64 27 434 8839
Private Bag 39804, Wellington Mail Centre 5045
Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt 5012
www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council, and Greater Wellington Regional Council.
We manage their drinking water, wastewater and stormwater services.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Euan Kyle

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>
Sent: Thursday, 21 May 2020 8:01 AM
To: Bruce Hodgins
Cc: Blair Dynan
Subject: Re: Public Taps update

Hi Bruce,
I'll liaise with the lab this morning

Nick Hewer-Hewitt
Manager - Network Performance

Sent from my iPhone

On 21/05/2020, at 07:54, Bruce Hodgins <bruce.hodgins@huttcity.govt.nz> wrote:

Thanks Blair. So has a sample been taken and sent to the lab.
I am aiming to open up for the weekend if possible.

Bruce

Bruce Hodgins

Strategic Advisor / Electoral Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6839, M 027 4820 461, W www.huttcity.govt.nz

<hccsmalllogo_12fb0640-f486-4c5a-a775-f4ab1b1dfb5d.jpg>

<12959GettingUsThroughESIGv1_d1aa4833-de6d-44ad-8c21-5600592d2ceb.jpg>

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: Blair Dynan [mailto:Blair.Dynan@wellingtonwater.co.nz]
Sent: Thursday, 21 May 2020 7:50 AM
To: Nick Hewer-Hewitt
Cc: Bruce Hodgins
Subject: RE: Public Taps update

Hi Nick,

We have flushed the Buick st bore yesterday, Filtec will be onsite Friday morning to inspect the filters and replace them if required.

Cheers

Blair Dynan Team Leader, Utilities North

<image001.jpg>

Phone 021 587 225

Private Bag 39804, Wellington Mail Centre 5045

Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt

www.wellingtonwater.co.nz

From: Nick Hewer-Hewitt <Nick.Hewer-Hewitt@wellingtonwater.co.nz>

Sent: Wednesday, 20 May 2020 9:52 AM

To: Blair Dynan <Blair.Dynan@wellingtonwater.co.nz>

Cc: Bruce Hodgins <bruce.hodgins@huttcity.govt.nz>

Subject: Public Taps update

Hi Blair,

It looks like RPH have given their approval to open the taps completely, albeit with increased signage and footpath marking (which HCC will arrange). At this stage we are looking at going live on Sat.

Can you please arrange with your team to get the Buick St bore flushed and Filtec to change the cartridges, ideally by Thurs? this will enable me time to arrange for Eurofins to take a sample on Thurs so we can get a result on Fri.

With regards to the Waiwhetu Marae, I will need to arrange and coordinate this separately as we don't have a key for the site yet, and the infrastructure is privately owned but managed and maintained by HCC (us). Once I have been given the nod by HCC and have the name for a contact person there, I will let you know our next steps.

Can I please asked that I be kept informed of progress and any issues so that nothing is a surprise?
☺

In terms of the rest of this week, we will continue with the Dowse plan as agreed.

Many thanks Blair for your help

Nick Hewer-Hewitt

Manager – Network Performance

Network Management Group

<image001.jpg>

Tel 04 912 4400 DDI +64 4 912 4415 Mob +64 27 434 8839

Private Bag 39804, Wellington Mail Centre 5045

Level 4, IBM House, 25 Victoria Street, Petone, Lower Hutt 5012

www.wellingtonwater.co.nz

Wellington Water is owned by the Hutt, Porirua, Upper Hutt and Wellington city councils, South Wairarapa District Council, and Greater Wellington Regional Council.

We manage their drinking water, wastewater and stormwater services.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not

liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Disclaimer to the maximum extent permitted by law, Wellington Water Limited is not liable (including in respect of negligence) for viruses or other defects or for changes made to this email or to any attachments.

Before opening or using attachments, check them for viruses and other defects.

Caution The information contained in this email is privileged and confidential and intended for the addressee only.
If you are not the intended recipient, you are asked to respect that confidentiality and not disclose, copy or make use of its contents.
If received in error you are asked to destroy this email and contact the sender immediately. Your assistance is appreciated.

Water, sanitation, hygiene, and waste management for the COVID-19 virus

Interim guidance
19 March 2020

Background

This interim guidance supplements the infection prevention and control (IPC) documents by summarizing WHO guidance on water, sanitation and health care waste relevant to viruses, including coronaviruses. It is intended for water and sanitation practitioners and providers and health care providers who want to know more about water, sanitation and hygiene (WASH) risks and practices.

The provision of safe water, sanitation, and hygienic conditions is essential to protecting human health during all infectious disease outbreaks, including the COVID-19 outbreak. Ensuring good and consistently applied WASH and waste management practices in communities, homes, schools, marketplaces, and health care facilities will help prevent human-to-human transmission of the COVID-19 virus.

The most important information concerning WASH and the COVID-19 virus is summarized here.

- Frequent and proper hand hygiene is one of the most important measures that can be used to prevent infection with the COVID-19 virus. WASH practitioners should work to enable more frequent and regular hand hygiene by improving facilities and using proven behavior-change techniques.
- WHO guidance on the safe management of drinking-water and sanitation services applies to the COVID-19 outbreak. Extra measures are not needed. Disinfection will facilitate more rapid die-off of the COVID-19 virus.
- Many co-benefits will be realized by safely managing water and sanitation services and applying good hygiene practices.

Currently, there is no evidence about the survival of the COVID-19 virus in drinking-water or sewage. The morphology and chemical structure of the COVID-19 virus are similar to those of other human coronaviruses for which there are data about both survival in the environment and effective inactivation measures. This document draws upon the evidence base and WHO guidance on how to protect against viruses in sewage and drinking-water. This document will be updated as new information becomes available.

1. COVID-19 transmission

There are two main routes of transmission of the COVID-19 virus: respiratory and contact. Respiratory droplets are generated when an infected person coughs or sneezes. Any person who is in close contact with someone who has respiratory symptoms (sneezing, coughing) is at risk of being exposed to potentially infective respiratory droplets.¹ Droplets may also land on surfaces where the virus could remain viable; thus, the immediate environment of an infected individual can serve as a source of transmission (contact transmission).

Approximately 2–10% of cases of confirmed COVID-19 disease present with diarrhoea,^{2,4} and two studies detected COVID-19 viral RNA fragments in the faecal matter of COVID-19 patients.^{5,6} However, only one study has cultured the COVID-19 virus from a single stool specimen.⁷ There have been no reports of faecal–oral transmission of the COVID-19 virus.

2. Persistence of the COVID-19 virus in drinking-water, faeces and sewage and on surfaces.

Although persistence in drinking-water is possible, there is no evidence from surrogate human coronaviruses that they are present in surface or groundwater sources or transmitted through contaminated drinking water. The COVID-19 virus is an enveloped virus, with a fragile outer membrane. Generally, enveloped viruses are less stable in the environment and are more susceptible to oxidants, such as chlorine. While there is no evidence to date about survival of the COVID-19 virus in water or sewage, the virus is likely to become inactivated significantly faster than non-enveloped human enteric viruses with known waterborne transmission (such as adenoviruses, norovirus, rotavirus and hepatitis A). For example, one study found that a surrogate human coronavirus survived only 2 days in dechlorinated tap water and in hospital wastewater at 20°C.⁸ Other studies concur, noting that the human coronaviruses transmissible gastroenteritis coronavirus and mouse hepatitis virus demonstrated a 99.9% die-off in from 2 days⁹ at 23°C to 2 weeks¹⁰ at 25°C. Heat, high or low pH, sunlight, and common disinfectants (such as chlorine) all facilitate die off.

It is not certain how long the virus that causes COVID-19 survives on surfaces, but it seems likely to behave like other coronaviruses. A recent review of the survival of human

coronaviruses on surfaces found large variability, ranging from 2 hours to 9 days.¹¹ The survival time depends on a number of factors, including the type of surface, temperature, relative humidity, and specific strain of the virus. The same review also found that effective inactivation could be achieved within 1 minute using common disinfectants, such as 70% ethanol or sodium hypochlorite (for details, see Cleaning practices).

3. Keeping water supplies safe

The COVID-19 virus has not been detected in drinking-water supplies, and based on current evidence, the risk to water supplies is low.¹² Laboratory studies of surrogate coronaviruses that took place in well-controlled environments indicated that the virus could remain infectious in water contaminated with faeces for days to weeks.¹⁰ A number of measures can be taken to improve water safety, starting with protecting the source water; treating water at the point of distribution, collection, or consumption; and ensuring that treated water is safely stored at home in regularly cleaned and covered containers.

Conventional, centralized water treatment methods that use filtration and disinfection should inactivate the COVID-19 virus. Other human coronaviruses have been shown to be sensitive to chlorination and disinfection with ultraviolet (UV) light.¹³ As enveloped viruses are surrounded by a lipid host cell membrane, which is not robust, the COVID-19 virus is likely to be more sensitive to chlorine and other oxidant disinfection processes than many other viruses, such as coxsackieviruses, which have a protein coat. For effective centralized disinfection, there should be a residual concentration of free chlorine of ≥ 0.5 mg/L after at least 30 minutes of contact time at pH < 8.0 .¹² A chlorine residual should be maintained throughout the distribution system.

In places where centralized water treatment and safe piped water supplies are not available, a number of household water treatment technologies are effective in removing or destroying viruses, including boiling or using high-performing ultrafiltration or nanomembrane filters, solar irradiation and, in non-turbid waters, UV irradiation and appropriately dosed free chlorine.

4. Safely managing wastewater and faecal waste

There is no evidence that the COVID-19 virus has been transmitted via sewerage systems with or without wastewater treatment. Further, there is no evidence that sewage or wastewater treatment workers contracted the severe acute respiratory syndrome (SARS), which is caused by another type of coronavirus that caused a large outbreak of acute respiratory illness in 2003. As part of an integrated public health policy, wastewater carried in sewerage systems should be treated in well-designed and well-managed centralized wastewater treatment works. Each stage of treatment (as well as retention time and dilution) results in a further reduction of the potential risk. A waste stabilization pond (an oxidation pond or lagoon) is generally considered a practical and simple wastewater treatment technology particularly well suited to destroying pathogens, as relatively long retention times (20 days or longer) combined with sunlight, elevated pH levels, biological activity, and other factors serve to accelerate pathogen destruction. A final disinfection step may be considered if existing wastewater treatment plants are not optimized to remove viruses. Best practices for protecting the health of workers at sanitation treatment facilities should

be followed. Workers should wear appropriate personal protective equipment (PPE), which includes protective outerwear, gloves, boots, goggles or a face shield, and a mask; they should perform hand hygiene frequently; and they should avoid touching eyes, nose, and mouth with unwashed hands.

WASH in health care settings

Existing recommendations for water, sanitation and hygiene measures in health care settings are important for providing adequate care for patients and protecting patients, staff, and caregivers from infection risks.¹⁴ The following actions are particularly important: (i) managing excreta (faeces and urine) safely, including ensuring that no one comes into contact with it and that it is treated and disposed of correctly; (ii) engaging in frequent hand hygiene using appropriate techniques; (iii) implementing regular cleaning and disinfection practices; and (iv) safely managing health care waste. Other important measures include providing sufficient safe drinking-water to staff, caregivers, and patients; ensuring that personal hygiene can be maintained, including hand hygiene, for patients, staff and caregivers; regularly laundering bedsheets and patients' clothing; providing adequate and accessible toilets (including separate facilities for confirmed and suspected cases of COVID-19 infection); and segregating and safely disposing of health care waste. For details on these recommendations, please refer to Essential environmental health standards in health care.¹⁴

1. Hand hygiene practices

Hand hygiene is extremely important. Cleaning hands with soap and water or an alcohol-based hand rub should be performed according to the instructions known as “My 5 moments for hand hygiene”.¹⁵ If hands are not visibly dirty, the preferred method is to perform hand hygiene with an alcohol-based hand rub for 20–30 seconds using the appropriate technique.¹⁶ When hands are visibly dirty, they should be washed with soap and water for 40–60 seconds using the appropriate technique.¹⁷ Hand hygiene should be performed at all five moments, including before putting on PPE and after removing it, when changing gloves, after any contact with a patient with suspected or confirmed COVID-19 infection or their waste, after contact with any respiratory secretions, before eating, and after using the toilet.¹⁸ If an alcohol-based hand rub and soap are not available, then using chlorinated water (0.05%) for handwashing is an option, but it is not ideal because frequent use may lead to dermatitis, which could increase the risk of infection and asthma and because prepared dilutions might be inaccurate.¹⁹ However, if other options are not available or feasible, using chlorinated water for handwashing is an option.

Functional hand hygiene facilities should be present for all health care workers at all points of care and in areas where PPE is put on or taken off. In addition, functional hand hygiene facilities should be available for all patients, family members, and visitors, and should be available within 5 m of toilets, as well as in waiting and dining rooms and other public areas.

2. Sanitation and plumbing

People with suspected or confirmed COVID-19 disease should be provided with their own flush toilet or latrine that has a door that closes to separate it from the patient's room. Flush toilets should operate properly and have functioning drain traps. When possible, the toilet should be flushed with the lid down to prevent droplet splatter and aerosol clouds. If it is not possible to provide separate toilets, the toilet should be cleaned and disinfected at least twice daily by a trained cleaner wearing PPE (gown, gloves, boots, mask, and a face shield or goggles). Further, and consistent with existing guidance, staff and health care workers should have toilet facilities that are separate from those used by all patients.

WHO recommends the use of standard, well-maintained plumbing, such as sealed bathroom drains, and backflow valves on sprayers and faucets to prevent aerosolized faecal matter from entering the plumbing or ventilation system,²⁰ together with standard wastewater treatment.²¹ Faulty plumbing and a poorly designed air ventilation system were implicated as contributing factors to the spread of the aerosolized SARS coronavirus in a high-rise apartment building in Hong Kong in 2003.²² Similar concerns have been raised about the spread of the COVID-19 virus from faulty toilets in high-rise apartment buildings.²³ If health care facilities are connected to sewers, a risk assessment should be conducted to confirm that wastewater is contained within the system (that is, the system does not leak) before its arrival at a functioning treatment or disposal site, or both. Risks pertaining to the adequacy of the collection system or to treatment and disposal methods should be assessed following a safety planning approach,²⁴ with critical control points prioritized for mitigation.

For smaller health care facilities in low-resource settings, if space and local conditions allow, pit latrines may be the preferred option. Standard precautions should be taken to prevent contamination of the environment by excreta. These precautions include ensuring that at least 1.5 m exists between the bottom of the pit and the groundwater table (more space should be allowed in coarse sands, gravels, and fissured formations) and that the latrines are located at least 30 m horizontally from any groundwater source (including both shallow wells and boreholes).²¹ If there is a high groundwater table or a lack of space to dig pits, excreta should be retained in impermeable storage containers and left for as long as feasible to allow for a reduction in virus levels before moving it off-site for additional treatment or safe disposal, or both. A two-tank system with parallel tanks would help facilitate inactivation by maximizing retention times, as one tank could be used until full, then allowed to sit while the next tank is being filled. Particular care should be taken to avoid splashing and the release of droplets while cleaning or emptying tanks.

3. Toilets and the handling of faeces

It is critical to conduct hand hygiene when there is suspected or direct contact with faeces (if hands are dirty, then soap and water are preferred to the use of an alcohol-based hand rub). If the patient is unable to use a latrine, excreta should be collected in either a diaper or a clean bedpan and immediately and carefully disposed of into a separate toilet or latrine used only by suspected or confirmed cases of COVID-19. In all health care settings, including those with suspected or confirmed COVID-19 cases, faeces must be treated as a biohazard and handled as little as possible. Anyone handling

faeces should follow WHO contact and droplet precautions¹⁸ and use PPE to prevent exposure, including long-sleeved gowns, gloves, boots, masks, and goggles or a face shield. If diapers are used, they should be disposed of as infectious waste as they would be in all situations. Workers should be properly trained in how to put on, use, and remove PPE so that these protective barriers are not breached.²⁵ If PPE is not available or the supply is limited, hand hygiene should be regularly practiced, and workers should keep at least 1 m distance from any suspected or confirmed cases.

If a bedpan is used, after disposing of excreta from it, the bedpan should be cleaned with a neutral detergent and water, disinfected with a 0.5% chlorine solution, and then rinsed with clean water; the rinse water should be disposed of in a drain or a toilet or latrine. Other effective disinfectants include commercially available quaternary ammonium compounds, such as cetylpyridinium chloride, used according to manufacturer's instructions, and peracetic or peroxyacetic acid at concentrations of 500–2000 mg/L.²⁶

Chlorine is ineffective for disinfecting media containing large amounts of solid and dissolved organic matter. Therefore, there is limited benefit to adding chlorine solution to fresh excreta and it is possible that this may introduce risks associated with splashing.

4. Emptying latrines and holding tanks, and transporting excreta off-site.

There is no reason to empty latrines and holding tanks of excreta from suspected or confirmed COVID-19 cases unless they are at capacity. In general, the best practices for safely managing excreta should be followed. Latrines or holding tanks should be designed to meet patient demand, considering potential sudden increases in cases, and there should be a regular schedule for emptying them based on the wastewater volumes generated. PPE (long-sleeved gown, gloves, boots, masks, and goggles or a face shield) should be worn at all times when handling or transporting excreta offsite, and great care should be taken to avoid splashing. For crews, this includes pumping out tanks or unloading pumper trucks. After handling the waste and once there is no risk of further exposure, individuals should safely remove their PPE and perform hand hygiene before entering the transport vehicle. Soiled PPE should be put in a sealed bag for later safe laundering (see Cleaning practices). Where there is no off-site treatment, in-situ treatment can be done using lime. Such treatment involves using a 10% lime slurry added at 1-part lime slurry per 10 parts of waste.

5. Cleaning practices

Recommended cleaning and disinfection procedures for health care facilities should be followed consistently and correctly.¹⁹ Laundry should be done and surfaces in all environments in which COVID-19 patients receive care (treatment units, community care centres) should be cleaned at least once a day and when a patient is discharged.²⁷ Many disinfectants are active against enveloped viruses, such as the COVID-19 virus, including commonly used hospital disinfectants. Currently, WHO recommends using:

- 70% ethyl alcohol to disinfect small areas between uses, such as reusable dedicated equipment (for example, thermometers);
- sodium hypochlorite at 0.5% (equivalent to 5000 ppm) for disinfecting surfaces.

All individuals dealing with soiled bedding, towels, and clothes from patients with COVID-19 infection should wear appropriate PPE before touching soiled items, including heavy duty gloves, a mask, eye protection (goggles or a face shield), a long-sleeved gown, an apron if the gown is not fluid resistant, and boots or closed shoes. They should perform hand hygiene after exposure to blood or body fluids and after removing PPE. Soiled linen should be placed in clearly labelled, leak-proof bags or containers, after carefully removing any solid excrement and putting it in a covered bucket to be disposed of in a toilet or latrine. Machine washing with warm water at 60–90°C (140–194°F) with laundry detergent is recommended. The laundry can then be dried according to routine procedures. If machine washing is not possible, linens can be soaked in hot water and soap in a large drum using a stick to stir and being careful to avoid splashing. The drum should then be emptied, and the linens soaked in 0.05% chlorine for approximately 30 minutes. Finally, the laundry should be rinsed with clean water and the linens allowed to dry fully in sunlight.

If excreta are on surfaces (such as linens or the floor), the excreta should be carefully removed with towels and immediately safely disposed of in a toilet or latrine. If the towels are single use, they should be treated as infectious waste; if they are reusable, they should be treated as soiled linens. The area should then be cleaned and disinfected (with, for example, 0.5% free chlorine solution), following published guidance on cleaning and disinfection procedures for spilled body fluids.²⁷

6. Safely disposing of greywater or water from washing PPE, surfaces and floors.

Current WHO recommendations are to clean utility gloves or heavy duty, reusable plastic aprons with soap and water and then decontaminate them with 0.5% sodium hypochlorite solution after each use. Single-use gloves (nitrile or latex) and gowns should be discarded after each use and not reused; hand hygiene should be performed after PPE is removed. If greywater includes disinfectant used in prior cleaning, it does not need to be chlorinated or treated again. However, it is important that such water is disposed of in drains connected to a septic system or sewer or in a soakaway pit. If greywater is disposed of in a soakaway pit, the pit should be fenced off within the health facility grounds to prevent tampering and to avoid possible exposure in the case of overflow.

7. Safe management of health care waste

Best practices for safely managing health care waste should be followed, including assigning responsibility and sufficient human and material resources to dispose of such waste safely. There is no evidence that direct, unprotected human contact during the handling of health care waste has resulted in the transmission of the COVID-19 virus. All health care waste produced during the care of COVID 19 patients should be collected safely in designated containers and bags, treated, and then safely disposed of or treated, or both, preferably on-site. If waste is moved off-site, it is critical to understand where and how it will be treated and destroyed. All who handle health care waste should wear appropriate PPE (boots, apron, long-sleeved gown, thick gloves, mask, and goggles or a face shield) and perform hand hygiene after removing it. For more information refer to the WHO guidance, Safe management of wastes from health-care activities.²⁸

Considerations for WASH practices in homes and communities.

Upholding best WASH practices in the home and community is also important for preventing the spread of COVID-19 and when caring for patients at home. Regular and correct hand hygiene is of particular importance.

1. Hand hygiene

Hand hygiene in non-health care settings is one of the most important measures that can prevent COVID 19 infection. In homes, schools and crowded public spaces – such as markets, places of worship, and train or bus stations – regular handwashing should occur before preparing food, before and after eating, after using the toilet or changing a child’s diaper, and after touching animals. Functioning handwashing facilities with water and soap should be available within 5 m of toilets.

2. Treatment and handling requirements for excreta.

Best WASH practices, particularly handwashing with soap and clean water, should be strictly applied and maintained because these provide an important additional barrier to COVID-19 transmission and to the transmission of infectious diseases in general.¹⁷ Consideration should be given to safely managing human excreta throughout the entire sanitation chain, starting with ensuring access to regularly cleaned, accessible, and functioning toilets or latrines and to the safe containment, conveyance, treatment, and eventual disposal of sewage.

When there are suspected or confirmed cases of COVID-19 in the home setting, immediate action must be taken to protect caregivers and other family members from the risk of contact with respiratory secretions and excreta that may contain the COVID-19 virus. Frequently touched surfaces throughout the patient’s care area should be cleaned regularly, such as beside tables, bed frames and other bedroom furniture. Bathrooms should be cleaned and disinfected at least once a day. Regular household soap or detergent should be used for cleaning first and then, after rinsing, regular household disinfectant containing 0.5% sodium hypochlorite (that is, equivalent to 5000 ppm or 1-part household bleach with 5% sodium hypochlorite to 9 parts water) should be applied. PPE should be worn while cleaning, including mask, goggles, a fluid-resistant apron, and gloves,²⁹ and hand hygiene with an alcohol-based hand rub or soap and water should be performed after removing PPE.

References

1. Coronavirus disease (COVID-19) advice for the public. Geneva: World Health Organization; 2020 (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>, accessed 3 March 2020).
2. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*. 2020;395:497–506. doi:10.1016/S0140-6736(20)30183-5.

3. Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y, et al. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. *Lancet*. 2020;395:507–13. doi:10.1016/S0140-6736(20)30211-7.
4. Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, et al. Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. *JAMA*. 2020. Feb 7. doi:10.1001/jama.2020.1585.
5. Xiao E, Tang M, Zheng Y, Li C, He J, Hong H, et al. Evidence for gastrointestinal infection of SARS-CoV. medRxiv. doi:10.1101/2020.02.17.20023721.
6. Holshue ML, DeBolt C, Lindquist S, Lofy KH, Wiesman J, Bruce H et al. for the Washington State 2019-nCoV Case Investigation Team. First case of 2019 novel coronavirus in the United States. *N Engl J Med*. 2020. Jan 31. doi:10.1056/NEJMoa2001191.
7. Zhang Y, Chen C, Zhu S et al. [Isolation of 2019-nCoV from a stool specimen of a laboratory-confirmed case of the coronavirus disease 2019 (COVID-19)]. *China CDC Weekly*. 2020;2(8):123-4. (In Chinese.)
8. Wang XW, Li JS, Zhen B, Kong QX, Song N, Xiao WJ et al. Study on the resistance of severe acute respiratory syndrome-associated coronavirus. *J Virol Methods*. 2005;126:171–7. doi:10.1016/j.jviromet.2005.02.005.
9. Gundy P, Gerba CP, Pepper IL. Survival of coronaviruses in water and wastewater. *Food Environ Virol*. 2009;1:10-14. doi:10.1007/s12560-008-9001-6.
10. Casanova L, Rutalal WA, Weber DJ, Sobsey MD. Survival of surrogate coronaviruses in water. *Water Res*. 2009;43(7):1893–8. doi:10.1016/j.watres.2009.02.002.
11. Kampf G, Todt D, Pfaender S, Steinmann E. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *J Hosp Infect*. 2020;104(3):246–51. doi:10.1016/j.jhin.2020.01.022.
12. Guidelines for drinking-water quality, fourth edition, incorporating the first addendum. Geneva: World Health Organization; 2017 (<http://apps.who.int/iris/bitstream/10665/254637/1/9789241549950-eng.pdf>, accessed 3 March 2020).
13. SARS-CoV-2 – water and sanitation. Adelaide: Water Research Australia; 2020 (http://www.waterra.com.au/r9544/media/system/attrib/file/2199/WaterRA_FS_Coronavirus_V10.pdf, accessed 3 March 2020).
14. Essential environmental health standards in health care. Geneva: World Health Organization; 2008 (https://apps.who.int/iris/bitstream/handle/10665/43767/9789241547239_eng.pdf?sequence=1&isAllowed=y, accessed 3 March 2020).
15. My 5 moments for hand hygiene. In: WHO/Infection prevention and control [website]. Geneva: World Health Organization; 2020 (<https://www.who.int/infection-prevention/campaigns/clean-hands/5moments/en/>, accessed 3 March 2020).
16. Siddharta A, Pfaender S, Vielle NJ, Dijkman R, Friesland M, Becker B, et al. Virucidal activity of World Health Organization-recommended formulations against enveloped viruses, including Zika, Ebola, and emerging coronaviruses. *J Infect Dis*. 2017;215(6):902–6. doi:10.1093/infdis/jix046.
17. WHO guidelines on hand hygiene in health care settings. Geneva: World Health Organization; 2009 (https://apps.who.int/iris/bitstream/handle/10665/44102/9789241597906_eng.pdf?sequence=1&isAllowed=y, accessed 3 March 2020).
18. Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected: interim guidance, 25 January 2020. Geneva: World Health Organization ([https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125), accessed 3 March 2020).
19. Q&A on infection prevention and control for health care workers caring for patients with suspected or confirmed 2019-nCoV. In: WHO/Newsroom [website]. Geneva: World Health Organization; 2020 (<https://www.who.int/news-room/q-a-detail/q-a-on-infection-prevention-and-control-for-health-care-workers-caring-for-patients-with-suspected-or-confirmed-2019-ncov>, accessed 3 March 2020).
20. Health aspects of plumbing. Geneva: World Health Organization; 2006. (<https://apps.who.int/iris/handle/10665/43423>, accessed 3 March 2020).
21. Guidelines on sanitation and health. Geneva: World Health Organization; 2018 (<https://apps.who.int/iris/bitstream/handle/10665/274939/9789241514705-eng.pdf?ua=1>, accessed 3 March 2020).
22. Yu ITS, Li Y, Wong TW, Tam W, Chan A, Lee JHW, et al. Evidence of airborne transmission of the severe acute respiratory syndrome virus. *N Engl J Med*. 2004;350(17): 1731-9. doi:10.1056/NEJMoa032867.
23. Regan H. How can the coronavirus spread through bathroom pipes? Experts are investigating in Hong Kong. CNN. 12 February 2020 (<https://edition.cnn.com/2020/02/12/asia/hong-kong-coronavirus-pipes-intl-hnk/index.html>).
24. Sanitation safety planning: manual for safe use and disposal of wastewater, greywater and excreta. Geneva: World Health Organization; 2015. (<https://apps.who.int/iris/handle/10665/171753>, accessed 3 March 2020).
25. How to put on and take off personal protective equipment. Geneva: World Health Organization; 2008 (<https://apps.who.int/iris/handle/10665/70066>, accessed 3 March 2020).
26. Chemical disinfectants: guideline for disinfection and sterilization in healthcare facilities (2008). In: CDC/Infection Control [website]. Atlanta: US Centers for Disease Control and Prevention; 2019. (<https://www.cdc.gov/infectioncontrol/guidelines/disinfection/disinfection-methods/chemical.html>, accessed 3 March 2020).

27. Best practices for environmental cleaning in healthcare facilities in resource-limited settings. Atlanta: US Centers for Disease Control and Prevention; 2019
(<https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-508.pdf>, accessed 3 March 2020).
28. Safe management of wastes from health-care activities: a summary. Geneva: World Health Organization; 2017
(<https://apps.who.int/iris/handle/10665/259491>, accessed 3 March 2020).
29. Home care for patients with suspected novel coronavirus (COVID-19) infection presenting with mild symptoms, and management of their contacts: interim guidance, 4 February 2020.
([https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-\(ncov\)-infection-presenting-with-mild-symptoms-and-management-of-contacts](https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts), accessed 3 March 2020).

US Centers for Disease Control and Prevention, United States of America; David Berendes, US Centers for Disease Control and Prevention, United States of America; Lisa Casanova, Georgia State University, United States of America; David Cunliffe, SA Health, Australia; Rick Gelting, US Centers for Disease Control and Prevention, United States of America; Dr Thomas Handzel, US Centers for Disease Control and Prevention, United States of America; Paul Hunter, University of East Anglia, United Kingdom; Ana Maria de Roda Husman, National Institute for Public Health and the Environment, the Netherlands; Peter Maes, Médecins Sans Frontières, Belgium; Molly Patrick, US Centers for Disease Control and Prevention, United States of America; Mark Sobsey, University of North Carolina-Chapel Hill, United States of America.

WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.

Contributors

This interim guidance was written by staff from WHO and UNICEF. In addition, a number of experts and WASH practitioners contributed. They include Matt Arduino,

© World Health Organization 2020. Some rights reserved. This work is available under the [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/) licence.