May 2014



CAPACITY
INFRASTRUCTURE
SERVICES LTD

WELLINGTON EMERGENCY WATER
STORAGE TANK MAINTENANCE AND
OPERATIONS PLAN

Quality Assurance Statement	
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#### 1. Purpose

The purpose of this plan is to outline procedures for maintenance and operation of Wellington City Council emergency water storage tanks.

#### 2. Objective

The primary objective of this plan is to ensure that these emergency water storage tanks are maintained in a fully operational state.

The emergency water storage tank maintenance and operation plan is designed to ensure we have the ability provide security of supplying of drinking water after an emergency.

The maintenance and operation plan will contribute to the wider Council strategy to ensure resilience to the community after any emergency event.

#### 3. Explanation of emergency water storage tanks

The emergency water storage tanks have been situated at Civil defence and welfare centres throughout the Wellington City. The tanks are there to provide a backup water supply to the community after a substantial emergency event that hits the city, i.e. earthquake. The tanks are plumbed in to the mains supply so that in the first instance they are kept full at all times with potable water. The tanks have a connection for water tankers to fill them if the mains supply is disrupted. In some instances the tanks have been connected to a roof supply to fill with rain water, this is a last option and is not fully functional until after the tank has been emptied of potable water and it has been deemed too difficult to fill from a water tanker.

#### 4. Emergency water tank maintenance

Each emergency water tank is to be visited 3 monthly (quarterly) for a general inspection which includes

- General inspection for damage i.e graffiti
- · General inspection of fittings
- Check that the tank is full (knocking on the side)
- Check signage
- Take sample post the tank for residual chlorine levels
- Take sample post the tank for HPC
  - o If result is greater than 500cfu/100mL resample for faecal coliforms

## 5. Quarterly Emergency water storage tank checks

Each site that is on either Wellington City Council or Ministry of Education land will have an emergency manifold kit that contains all the equipment required to allow for the public to get access to the water contained within the tanks. These manifold kits are to be checked every 3 months to ensure that they are complete. Appendix 3 contains the list of items contained within the manifold kit.

#### 6. Reporting

Maintenance general checks are reported to:

Capacity Infrastructure Services

Emergency water tank maintenance check sheet is in appendix 1. These must be forwarded to Capacity Infrastructure Services monthly.

#### 7. Emergency water tank maintenance

If during the inspections and maintenance issues are noticed these are to be notified to Capacity Infrastructure Services immediately.

### 8. Emergency Water Storage tank operation

Appendix 3 contains the flow diagram that is at each site for the use of the emergency water storage tank.

# 9. Appendix 1

# **General maintenance form**

Emergency Water S	Storage Tank Inspection Form and Check List
Site name:	Suburb:
Inspected by:	Company:
Date:	Time:
Insert picture, photograph or diagra	ım as appropriate
Water meter reading	
Outlet coupling condition:	
Tank full of potable water:	Yes / no
Graffiti:	Yes / no
Signage:	
Other:	
Manifold kit (checked quarterly):  A Distribution manifold wi and four separate legs A hydrant standpipe Lay-flat pipe Tap handle Valve key	th six taps

# 10. Appendix 2

# **List of Emergency Water Storage Tanks**

# Linden Social Centre Kit located inside community centre

Location of Linden Social centre:



Photo of Linden Social centre and tank:



Location of water meter, sign and sample tap

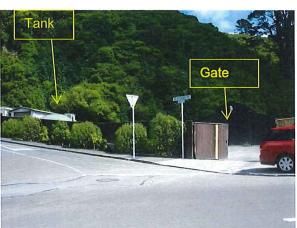


Highbury – Raroa Yard. This site requires WCC key #WCFS

Location tank:



Photo Raroa yard and tank:



Location of sign and sample tap



Note: THERE IS NO WATER METER AT THIS SITE

Notes:

Kit does not need checking as inside emergency shed

#### Grenada Village Hall

#### Location of tank:



#### Photo of tank:



Location of water meter (just out of view).



Location of sample tap



Note: Sample tap handle has been removed to stop tap being turned on when not needed. Tap handle required when taking samples.

Note: kit does not need checking as hall generally in use for special occasions only.

#### Khandallah Community Centre

Location tank:



Note: Sign in at the community centre is required. Open hours between 9am and 1pm

Photo Location: Down alley way



Photo Location: Behind gate with sign on it.



Location of sample tap (behind gate)



Note: THERE IS NO WATER METER AT THIS SITE

Notes: Manifold kit stored inside community centre

#### Tawa Community Centre

Location tank:



Note: Sign in at the community centre is required. Open hours between 9am and 1pm.

Photo Location:



Location of tank (behind gate) and sign



Notes: THERE IS NO WATER METER AT THIS SITE

Manifold kit is stored inside community centre

Location of sample taps: Between the two tanks



#### Tawa Rural Fire

Location of tank: Access via swimming pool carpark

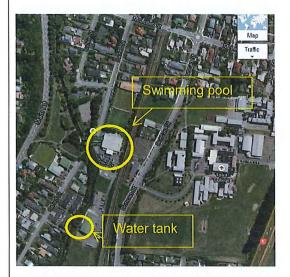


Photo of tank: On the railway side of the building



View from swimming pool car park. Tank at far end of building



Location of sample tap, on far side of building by fence.



Note: THERE IS NO WATER METER AT THIS SITE

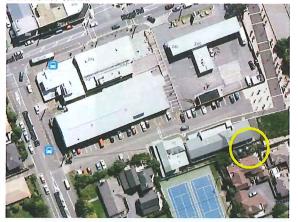
There is no manifold kit to be inspected

Location of sign, on building above sample tap



#### Karori Community Centre

Location tank:



Note: Sign in at the community centre is required. Open hours between 9am and 1pm

Photo Location: Behind gate with sign next to it and to the left.





Location of sample tap (behind gate)



Notes: THERE IS NO WATER METER AT THIS SITE

The manifold kit is kept inside the community centre

#### Newlands

Location of tank: Across Newlands Road from the new World supermarket



Photo of tank: Taken from just off Newlands Road



Location of sample tap and sign



Notes: THERE IS NO WATER METER AT THIS SITE

The manifold kit does not need to be checked as it is looked after by volunteer fire.

#### Miramar Community Centre

Location of tank: Chelsea St Miramar



Photo of tank: Taken from Chelsea St



#### Location of water meter



Note: The manifold kit is kept inside the community centre

#### Location of tap



Rex Street Community housing There may not be a sign yet Location of tank: 11 Rex St Miramar Photo of tank: Taken from Rex St Location of tap Location of water meter Note: Currently there is no manifold kit for this

#### Te Whaea Dance and Drama School

Location of tank: Hutchison Road Newtown

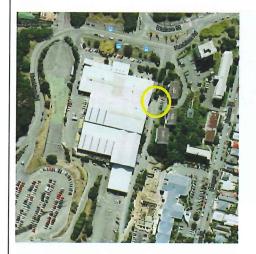


Photo of tank: Taken from car park



Tap is located inside yellow circle. Tap handle is with manifold

Location of water meter



Note: Manifold kit is inside building. Please sign in each time at reception

Note: there may not be a sign yet

	Location of tank: 7 The Strand Wainuiomata	Photo of tanks:
	Location of tank. 7 The Strand Walnulomata	FIIOLO OI TAIIKS.
	Location of water meter	Note: there may not be a sign yet
	Note: There is no manifold at this site. Please sign in at the front desk.	
<u>(</u>		

Brooklyn Community Centre Harrison St Brooklyn		
Location of tank: Hutchison Road Newtown	Photo of tank:	
Location of water meter	Note: there may not be a sign yet	
	beautiful. The Man and a	
Note: There is no manifold at this site. If the community centre is open please sign in at front desk.		

Houghton Bay School	
Location of tank: Houghton Bay Road	Photo of tank:
Location of water meter	Note: there may not be a sign yet
e ·	
Note: There is no manifold at this site. Site is in the middle of the playground, please sign in at office	

Photo of tank:
Note: there may not be a sign yet

Seatoun School	
Location of tank: Burnham Street Seatoun	Photo of tank:
Location of water meter	Note: there may not be a sign yet
Note: There is no manifold at this site. Site is in the playground, please sign in at the office.	

Te Aro School	
Location of tank: The Terrace (Able Smith St end)	Photo of tank:
Location of water meter	Note: there may not be a sign yet
Note: There is no manifold at this site. Site is in the car park, no need to sign in at the office.	

Berhampore School	
Location of tank: Corner of Britomart Street and Stanley Street	Photo of tank:
Editional St. Editional St. Editional St.	
Location of water meter	Note: there may not be a sign yet
Note: There is no manifold at this site. Site is on the side of the road, no need to sign in at the office.	
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Photo of tank:
Note: there may not be a sign yet

#### Maungaraki Community Centre

Location of tank: 131 Dowse Drive Maungaraki

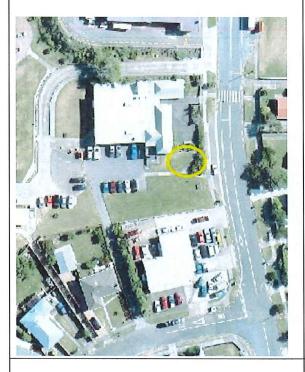


Photo of tank:



Location of sign:



Location of sample tap:



Note: No manifold on-site and no sign-in required

#### Te Mangungu Marae INC

Location of tank: Corner of Fleet and Rata Streets, Lower Hutt



Photo of tank:



Location of sign:



Notes: Contact Margaret (Resident) on 02040341381 before attending the site. Manifold is on-site, Margaret will let you know where it is located at.

#### Koraunui Marae

Location of tank: 146 Stokes Valley Road, Lower Hutt



Photo of tank:



Location of sign and tap:



Notes: Contact Philomenia at <a href="mailto:kmatrust@koraunuimarae.co.nz">kmatrust@koraunuimarae.co.nz</a> or 0297706285 before carrying out in inspection. Manifold is onsite.

#### The Dutch House

Location of tank: 61 Taita Drive, Avalon Park



Photo of tank:



#### Location of sign:



Notes: No manifold on-site and no sign-in. Contact Aaron Marsh at HCC if needed.

Crofton Downs Primary School	
Location of tank: Chartwell Drive, Crofton Downs, Wellington 6035	Photo of tank:
Location of water meter:	Note: Manifold is with the school. Please phone before attending to check the manifold.
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# Johnsonville School Location of tank: 10 Morgan Street, Johnsonville, Photo of tank: Wellington 6037 Note: Sign-in at the office is required. Location of water meter: Manifold is with the school, check with the office on where it is located at.

Suburb	Location	Address	CDC
Linden	Linden Social Centre	8 Linden Ave	YES
Highbury	Raroa Yard	Raroa Road	NO
Grenada Village	Grenada Village Hall	2 Mandeville Crescent	YES
Khandallah	Community Centre	12 Ganges Road	YES
Tawa	Community Centre	6 Cambridge Street, Tawa	YES
Karori	Community Centre	8 Beauchamp Street, Karori	YES
Miramar	Community Centre	27 Chelsea St	YES
Tawa	Rural fire depot		No
Newlands	Fire Station		No
Rex Street	Community housing	11 Rex St Miramar	No

# 11. Appendix 3

#### List of items in manifold kit

Items contained within a manifold kit, to be checked every three months in conjunction with monthly maintenance checks.

- A Distribution manifold with six taps and four separate legs
- A hydrant standpipe
- Lay-flat pipe
- Tap handle
- Fire hydrant stand pipe
- Valve key
- Instructions for use

# **Copies of this report**

This was produced by Capacity Infrastructure Services on behalf of Wellington City Council.

Additional copies can be obtained by contacting Capacity at the following addresses:

Telephone: 04 9103833

Email: info@capacity.net.nz

Alternatively you can write to us at:

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Wellington Mail Centre

Petone 5045

Attention: Asset Planning

An electronic copy is available in PDF format on:

www.capacity.net.nz