

NaturalFlow Series NF11000 Treatment System

System Specifications & Installation Instructions



NATURALFLOW SERIES NF11000

System Specification & Installation Instructions

New Zealand's Leaders in Eco-Sustainable, Odourless Wastewater and Sewage Systems

Compliance Requirements

All NaturalFlow Treatment Systems meet the requirements of the NZ Building Code G13-VM4.

Section 9 of AS/NZS 1546.1:2008 state that tanks constructed to these Standards will meet the requirements of the Code for Clauses B1 and B2, structure and durability.

Compliance with Section 9 of AS/NZS 1546.1:2008 and also Clauses G13.3.4 relating to on-site treatment and disposal systems and G14.3.1 and 14.3.2 relating to the control of foul water as an industrial waste are covered in the 'NaturalFlow Compliance Requirements' document.

Please feel free to ask for a copy of this complete document, if required.

The Treatment Process

The NaturalFlow Series NF11000 System comprises of a 1.26m diameter x 1.56m high WORMORATOR® module where the black water (B/W), (which in the NaturalFlow System includes the kitchen sink waste) in order to remove the solids, is directed onto a bed of natural medium lined with a textile cloth which is designed to retain maximum solids.

These residual solids are seeded with tiger worms which proceed, as results of long term testing have shown, to digest them reducing the volume by approximately 95%, leaving only residual vermicasts which are virtually free of harmful bacteria and other pollutants. The B/W then flows through a secondary filter tray which further treats the water reducing the TSS & BOD and also reducing the particle size, in the TSS, to less than 1mm. This secondary treatment tray acts as an in-built outlet filter AS/NZS 1546 1:2008 Clause D3.3. and has a minimum life expectancy of 15 years. It then flows into the Dose Treatment Chamber where it is combined with the grey water (G/W) and settlement and filtration takes place. Its final treatment, through an aerating matrix filter, brings its treatment level up to meet the 20/30 BOD/TSS, Secondary Treatment criteria and it is then reintroduced into the environment in accordance with AS/NZS 1547:2012 and the relevant local authorities' requirements.

The G/W, which is separated at its source from the B/W, flows first into the Grey Water Treatment Tank that retains the bulk of the scum and solids and then trickle filters through an aerating matrix filter and layers of natural media. It is then combined with the B/W in the Wormorator® Chamber for disposal in accordance with AS/NZS 1547:2012 This filter chamber has a buffering capacity of 1000ltrs to contain any surge flows.

The size and extent of the disposal system is determined by the receiving environment and the expected flow volumes. Factors such as soil types, slope and the proximity of potentially sensitive environments such as creeks, wells, bores and other water ways determine the extent, location and type of disposal system chosen.

The Wormorator® and associated dose tank has a 2000ltr reserve capacity where pump loading is necessary to allow for 24hrs emergency storage should a pump fail. The operating capacity of the NaturalFlow Series NF11000 Treatment System is 2000ltrs per day of combined Black and Grey water.

Because the Wormorator® is a dry vault system there is negligible sludge build up so it does not require any regular de-sludging. This specifically meets clause AS/NZS 1547:2012 4.2.2.1 as to de-sludging requirements.

See our website: www.naturalflow.co.nz

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Wormorator® & Dose Chamber Specifications

Tanks are made of Cotene 9050 which is a linear medium density polyethylene, designed specifically for rotational molding of large tanks and products that require a high level of rigidity. It contains a fully formulated long term UV stabilization package (with a minimum UV8 rating) and is suitable material for wastewater treatment containment meeting all the requirements of Section 4.3.3 of AS/NZS 1547:2012 which cross references the structural performance requirements of its section 2.4.2.3 back to the relevant provisions of AS/NZS 1546.1, which for plastic septic tanks constructed via by rotational molding using thermoplastics (polyethylene) are set out in Section 9 of that Standard. These tanks have an expected lifespan of 50 years.

SXL5000 Wormorator® Module

4000ltrs Nominal capacity
1800mm Diameter over main body
2200mm over feet
1700 mm O/A height

Dose Chamber

1500ltrs Nominal capacity
1200mm Diameter over main body
732mm Riser Diameter
2125mm O/A height

Grey Water Treatment Tank

1200ltrs Nominal capacity
1200mm Diameter over main body
1700mm O/A height

Installation Location and Certification

These tanks are not designed for vehicle loads and shall be located no closer than 1.50m to a driveway, road frontage or a building. If for any reason the tank is located where vehicle traffic may drive over the tank or approach closer than 1.50m, or where it may be trampled on by farm stock then the tank should be protected by a concrete slab designed to support these loads. Surface water must also be diverted from flowing into the installation.

Installation must be certified to AS/NZS 1547:2012, the certificate to be issued and held by the regulatory authority.

High Water Table Installations

All tanks have been engineered and designed with support ribbing for maximum strength, in accordance with the NZC 3604. Clauses B1 and B2 for structure and durability, to withstand any hydraulic pressures, both lateral and uplift, created by high water table conditions, even when the tanks are completely empty at install stage.

As per the NaturalFlow Systems installation instructions, in these conditions, tanks must be anchored in with concrete around base, as per the installation instructions, to height as specified.

Plumbing Pipes and Fittings

All internal plumbing is done with PVC pipes with appropriate connections according to AS/NZS 1260 and AS/NZS 4130.

If in doubt contact the experts on 0800 628 356 or sales@waterflow.co.nz

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Backfill and Bedding

Place and bed to NZBC G13/AS2, using compacted granular metal, in layers not exceeding 100mm.

Electrical

Where a pump is required on a flat site electrical connection must be installed according to AS/NZS 3000 and the control and alarm system must be in a weatherproof housing located in a readily visible position.

Warranty

WATERFLOW NZ LTD warrants that the NaturalFlow System will be free from defects in material and workmanship for the following periods of time from the date of installation as set out in the following conditions:

1. Roto-Molded tanks 15yrs
2. Filter media 15yrs
3. Dosing float/and or pumps 2yrs
4. WATERFLOW NZ LTD will at its discretion replace or repair such components that prove to be faulty with the same or equivalent part at no charge.
5. Warranty of operation covers the performance of the NaturalFlow systems as connected to the effluent inflow for which they are designed, and also installed to the criteria as set out in the relative installation instructions and procedures.

Warranty excludes defects due to:

- A) Failure to use the system in accordance with owner's manual.
- B) A force majeure event outside the reasonable control of WATERFLOW NZ LTD such as (but not limited to) earthquake, fire, flood soil subsidence ground water table variations or plumbing fault.
- C) Modifications to surrounding landscape contours after installation
- D) The actions of a third party
- E) The system required to bear loads (either hydraulic or biological) greater than that for which it was designed
- F) Any modifications or repairs undertaken without the consent of WATERFLOW NZ LTD
- G) Failure, where applicable, to fence and plant land application system (disposal field)



1st June 2014
Dean Hoyle
Managing Director

NATURALFLOW SERIES NF11000

System Specification & Installation Instructions

NaturalFlow Series NF11000 Dose Installation Instructions

The NaturalFlow system is to be installed or signed off by a registered Drain layer to the design specified by Waterflow NZ Ltd.

The following installation instructions and procedures followed correctly will ensure System performance is not compromised in any way.

1. Excavate a 2.5m diameter level platform for the Wormorator® at the appropriate depth to ensure adequate fall for inlet pipe from the source. This has to be installed on virgin ground.
2. Lay 100mm of bedding metal on platform and place Wormorator®. Do this before excavating for dose chamber as this helps keep the excavations to a minimum.
3. Analyze where the dose chamber needs to be placed (this needs to line up with one of the feet at the base of the WORMORATOR®) and excavate a 1.3m diameter level platform 550mm below the Wormorator platform (this allows for 100mm of bedding material).
4. Very carefully drill a 127mm hole with a hole saw at the lowest point of the foot on Wormorator and fit Uniseal (see Uniseal instruction details appendix B below).
5. Lay 100mm of bedding metal on dose chamber platform and place tank.
6. Measure the distance between the Wormorator outlet and dose chamber inlet allowing 50mm both ends to insert into tanks. Mark pipe before inserting to ensure there is 50mm of pipe inside both tanks also fit the directional junction with flow being towards dose chamber.
7. Fit enough riser pipe to directional junction, to bring it up to grey water outlet level.
8. Trench from Dose Chamber outlet to disposal field, ensuring there is a constant fall from outlet to disposal field.
9. Where possible excavate a trench away from System and lay drain coil and drainage metal at the base of the system to drain away any surface or ground water. On a flat or high water table site System must be bedded in as per appendix A below.
10. Take a minimum of 3 photos at this point to showing connections and back fill, to ensure correct installation for sign off.
11. Back fill around the installed tanks until the required depth for the Grey Water module is reached, then excavate a level platform off 1.5m diameter and position tank on 100mm of bedding material and connect to 'riser'.
12. Back fill around tanks with pea-metal or similar. DO NOT back fill with soil or clay of any type as this can cause point pressure on the modules, through expansion and contraction, and will cause distortion.

Caution: System must be protected from excessive super imposed loads both lateral and top loads. E.g. loads from vehicular traffic. There needs to be at least 2m of clearance maintained around system.

Worms: Ensure adequate moisture in the Wormorator® and add worms once installed unless systems is not going to be used within 2 months of installation.

If in doubt contact the experts on 0800 628 356 or sales@waterflow.co.nz

NATURALFLOW SERIES NF11000

System Specification & Installation Instructions

NaturalFlow Series NF11000 Pump Installation Instructions

The NaturalFlow system is to be installed or signed off by a registered Drain layer to the design specified by Waterflow NZ Ltd.

The following installation instructions and procedures followed correctly will ensure System performance is not compromised in any way.

1. Excavate a 2.5m diameter level platform for the Worminator® at the appropriate depth to ensure adequate fall for inlet pipe from the source. This has to be installed on virgin ground.
2. Lay 100mm of bedding metal on platform and place Worminator®. Do this before excavating for dose chamber as this helps keep the excavations to a minimum.
3. Analyze where the dose chamber needs to be placed (this needs to line up with one of the feet at the base of the WORMINATOR®) and excavate a 1.3m diameter level platform 550mm below the Worminator platform (this allows for 100mm of bedding material).
4. Very carefully drill a 127mm hole with a hole saw at the lowest point of the foot on Worminator and fit Uniseal (see Uniseal instruction details appendix B below).
5. Lay 100mm of bedding metal on dose chamber platform and place tank.
6. Measure the distance between the Worminator outlet and dose chamber inlet allowing 50mm both ends to insert into tanks. Mark pipe before inserting to ensure there is 50mm of pipe inside both tanks also fit the directional junction with flow being towards dose chamber.
7. Fit enough riser pipe to directional junction, to bring it up to grey water outlet level.
8. Where possible excavate a trench away from System and lay drain coil and drainage metal at the base of the system to drain away any surface or ground water. On a flat or high water table site System must be bedded in as per appendix A below.
9. Take a minimum of 3 photos at this point to showing connections and back fill, to ensure correct installation for sign off.
10. Back fill around the installed tanks until the required depth for the Grey Water module is reached, then excavate a level platform off 1.5m diameter and position tank on 100mm of bedding material and connect to 'riser'.
11. Trench from Dose Chamber outlet to disposal field, ensuring there is a constant fall from outlet to disposal field.
12. Back fill around tanks with pea-metal or similar. DO NOT back fill with soil or clay of any type as this can cause point pressure on the modules, through expansion and contraction, and will cause distortion.

Caution: System must be protected from excessive super imposed loads both lateral and top loads. E.g. loads from vehicular traffic. There needs to be at least 2m of clearance maintained around system.

Worms: Ensure adequate moisture in the Worminator® and add worms once installed unless systems is not going to be used within 2 months of installation.

See our website: www.naturalflow.co.nz

NATURALFLOW SERIES NF11000

System Specification & Installation Instructions

Appendix A and B

Appendix A

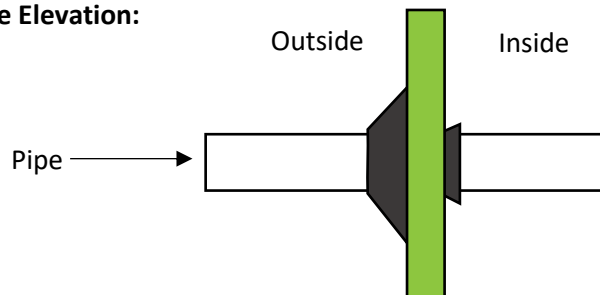
High Water Table: For installation in high water table areas, make sure you have a pump to pump away ground water whilst installing. Excavate a pump cavity to one side of the platform and pump ground water away during entire installation process. Half fill dose tank with water, this will flow back into Wormerator as well and will help with resisting the hydraulic uplift (ensure that Wormerator is not completely flooded). Either lay 2-3m³ of concrete around the base of the tanks or mix 3 bags of cement/cube of GAP20 (or similar) metal to form a mass to stop any hydraulic uplift. Leave water in tanks for at least 12 hours after installation is completed and then pump out to allow Wormerator to dry out.

Appendix B

Instructions for fitting UNISEAL®

1. Cut hole to the Hole saw size indicated for the UNISEAL® you are using. Either 127mm hole for a 4"/100mm pipe or 67.2mm hole for a 2"/50mm pipe.
2. Ensure that the hole is clean cut with sharp edges. Irregularities could cause poor seating and ultimate leakage.
3. Insert the UNISEAL® into the hole with the wide side facing the pipe to be inserted.
4. Make certain that the pipe end to be inserted is clean cut. File the edges so that there are no sharp points to cut UNISEAL®.
5. Using Detergent, lubricate the outside of the pipe end to be inserted, then push the pipe through the UNISEAL® from the large flange side. The detergent will be squeezed off as the pipe passes through the UNISEAL®. The co-efficient of friction of the rubber holds the pipe tightly in place.

Side Elevation:



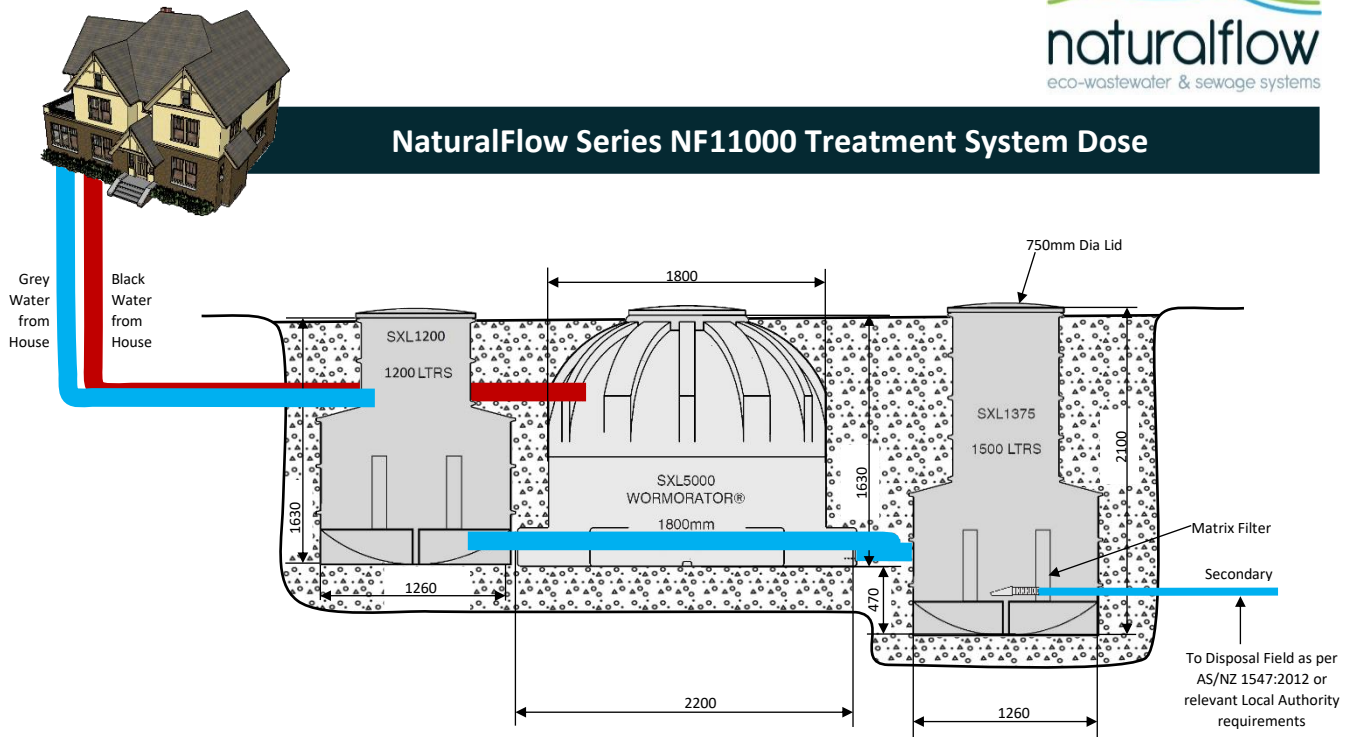
NATURALFLOW SERIES NF11000

System Specification & Installation Instructions

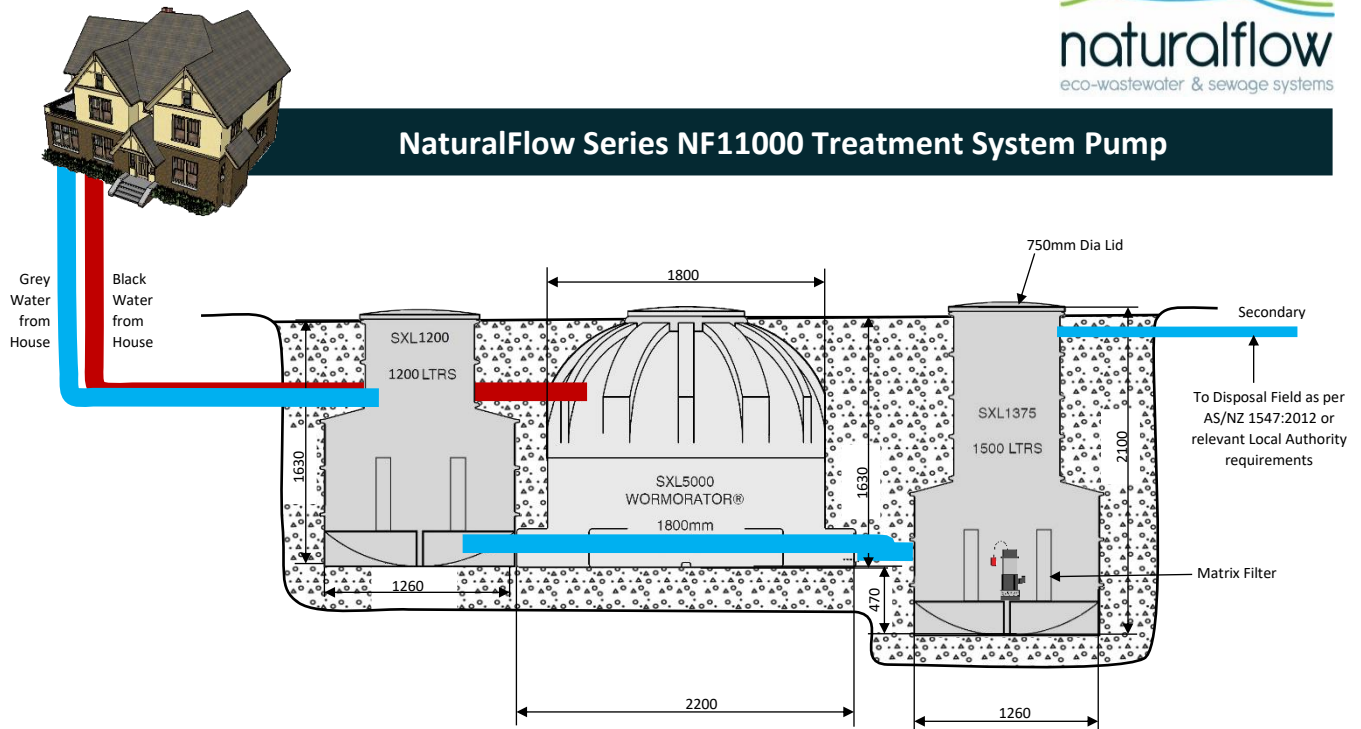
NaturalFlow Series NF11000 Flow Charts



NaturalFlow Series NF11000 Treatment System Dose



NaturalFlow Series NF11000 Treatment System Pump





"We do it simpler"



Call us today to discuss your needs

0800 628 356

Or for more information www.naturalflow.co.nz



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eco-wastewater & sewage systems

by Waterflow NZ Ltd

“We do it simpler”



Home Owner Care Guide

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HOME OWNERS CARE GUIDE

• *To The Home Owner*

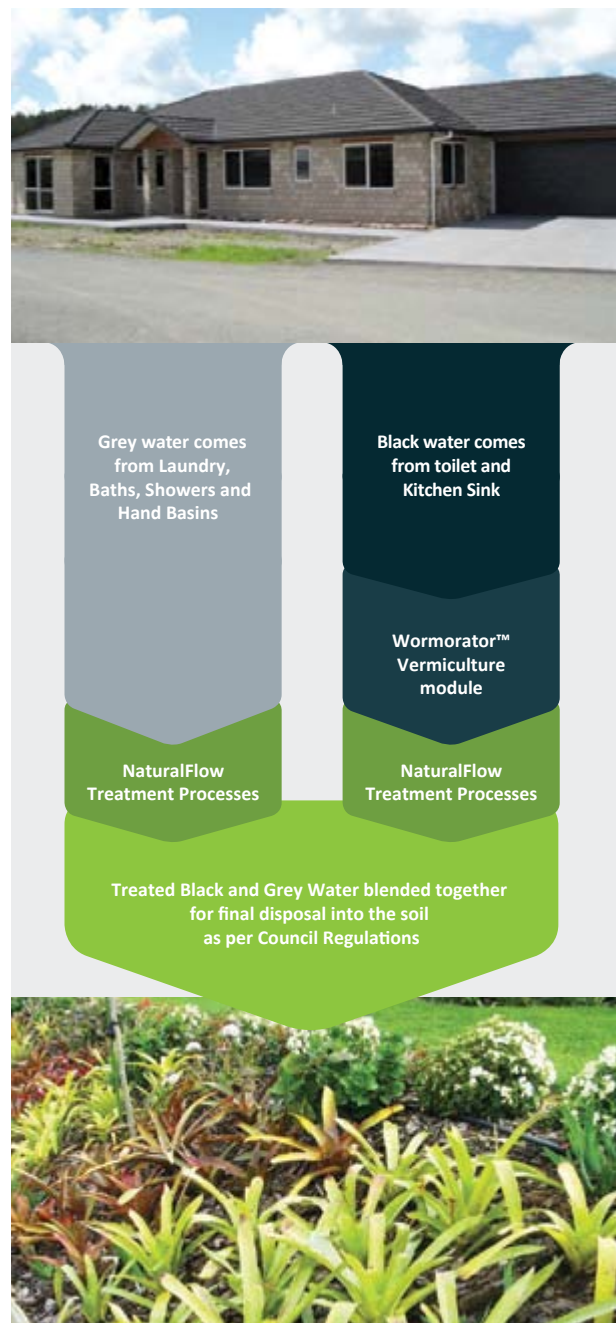
Thank you for choosing a NaturalFlow System to treat and care for your on-site sewage and wastewater.

NaturalFlow is a truly natural living system that uses well-established, sustainable processes to treat both solid and liquid waste. Nature is one huge recycling mechanism and NaturalFlow harnesses these forces that have been working together for thousands of years and continue to do so today, working with our environment, to treat your wastewater. The system does not draw on any other resources and does not use external power in any of the treatment processes.

We would encourage you to monitor and care for your NaturalFlow system yourself with our backing and support and by doing so you will learn how your system works and operates and how to keep it in top working order. As with all living organisms a little care and supervision will ensure that it will run at peak performance for many years.

The system accommodates and works with all of today's conveniences such as conventional toilets, 'waste master' units from the kitchen and more. All domestic wastewater can be taken care of and even on steep and difficult sites with poor soakage; NaturalFlow will deliver consistent results year after year.

Kind regards,
The NaturalFlow Team



HOME OWNERS CARE GUIDE

• **Waterflow NZ Ltd Warranty**

WATERFLOW NZ LTD warrants that the NaturalFlow System will be free from defects in material and workmanship for the following periods of time from the date of installation as set out in the following conditions:

1. Roto-Moulded tanks 15yrs
2. Filter media 15 yrs.
3. Dosing float and/or pumps 2yrs
4. WATERFLOW NZ LTD will at its discretion replace or repair such components that prove to be faulty with the same or equivalent part at no charge.
5. Warranty of Operation covers the performance of the NaturalFlow System as connected to the effluent inflow for which they are designed, and has been installed to the criteria as set out in the relative installation instructions and procedures, and has an assigned Service/Maintenance contract in place with Waterflow NZ Ltd or it's appointed agent/s.

Warranty excludes defects due to:

- A) Failure to use the system in accordance with owner's manual.
- B) A force majeure event outside the reasonable control of WATERFLOW NZ LTD such as (but not limited to) earthquake, fire, flood, soil subsidence, ground water table variations or plumbing fault.
- C) Modifications to surrounding landscape contour after installation
- D) The actions of a third party
- E) The system required to bear loads (either hydraulic or biological) greater than that for which it was designed
- F) Any modifications or repairs undertaken without the consent of WATERFLOW NZ LTD
- G) Failure, where applicable, to fence and plant disposal field.



Dean Hoyle
Managing Director.



HOME OWNERS CARE GUIDE

• *Caring For Your Wastewater And Sewage System*

Home Owner Care Role

The Home owner is greatly encouraged to maintain a monthly visual check of the operation of their system and to make sure their land application systems are maintained in good condition.

1. Industry recommendation is to have a maintenance contract in place at all times
2. Visual check of treatment system
3. Visual check of land application system
4. Notify Waterflow NZ of any issues

Inspection Checklist:

When checking the system operation, take particular note of;

1. Wormerator build-up. Six monthly level should be no higher than 200mm below inlet pipe (simple observation through lid adequate).
2. Field performance, particularly looking for any undue odours or effluent breakout (flush field lines 2–3 monthly).
3. All electrical parts (if applicable). Ensure all pump alarms are working.
4. Check Grey Water and Dose tank outlet filter for any build-up.
5. Check Aerating Bio-Filter charge tank (1200 pump) for correct operation (simple observation through lid adequate) and that the plants themselves look healthy and lush (these can be trimmed if desired to keep looking tidy).

Did you know...

...that as a homeowner you're responsible to make sure your wastewater system gets the required maintenance needed to protect the investment in your home? This guide will help you care for your wastewater system. It will help you understand how your system works and what steps you can take as a homeowner to ensure your system will work efficiently.

HOME OWNERS CARE GUIDE

• *Caring For Your Wastewater And Sewage System*

Components of Your Complete Wastewater Septic System

A typical wastewater septic system has two main components: a Wastewater and Sewage Treatment System and a Land Application System (or disposal field)

The NaturalFlow System treats and reduces the solid content of the wastewater by up to 95%. The wastewater liquid then flows to the disposal field, where it percolates into the soil, and microbes provide final treatment by removing harmful bacteria, viruses, and nutrients before it eventually reaches the groundwater ecosystem, and the cycle begins again.

Efficient Water Use – ‘it does make a difference’

Average indoor water use in the typical single-family home is approximately 180ltrs per person per day. The more water a household conserves, the less water enters the septic system. Efficient water use can improve the operation of the wastewater system and reduce any risk of disposal field overload.

High-efficiency toilets

Toilet use accounts for 25 to 30 percent of household water use.

Do you know how many litres of water your toilet uses to flush? Most older homes have toilets with 11+ litre reservoirs, while newer high-efficiency dual flush toilets use 6.3/5.5ltrs or down to 4.5/3ltrs of water per flush. **N.B.** Did you know leaky toilets can waste as much as 700ltrs each day.

Consider reducing the volume of water in the toilet tank with a volume displacer (fancy name for a brick, stone etc!) if you don't have a high-efficiency model, or replacing your existing toilets with high-efficiency models.

Check to make sure your toilet's reservoir isn't leaking into the bowl. Add five drops of liquid food colouring to the reservoir before bed. If the dye is in the bowl the next morning, the reservoir is leaking and repairs are needed.

Water fixtures

A small drip from a faucet may add many litres of unnecessary water to your system every day. To see how much a leak adds to your water usage, place a cup under the drip for 10 minutes. Multiply the amount of water in the cup by 144 (the number of minutes in 24 hours, divided by 10). This is the total amount of clean water travelling to your septic system each day from that little leak.

Faucet aerators and high efficiency showerheads

Faucet aerators help reduce water use and the volume of water entering your septic system. High-efficiency showerheads also reduce water use.



HOME OWNERS CARE GUIDE

• *Caring For Your Wastewater And Sewage System*

Washing machines

By selecting the proper load size, you'll reduce wastewater. Washing small loads of laundry on the large-load cycle wastes precious water and energy. If you can't select load size, run only full loads of laundry. **N.B.** A new Energy Star washing machine uses 35 percent less energy and 50 percent less water than a standard model.

Watch your drains!

What goes down the drain can have a major impact on how well your wastewater system works.

What shouldn't you flush down your toilet?

Dental floss, feminine hygiene products, diapers, cotton swabs, cigarette butts, cat litter, and other kitchen and bathroom items that can clog and potentially damage septic system components if they become trapped. Flushing household chemicals, gasoline, oil, pesticides, antifreeze, and paint can also stress or destroy the biological treatment taking place in the system or might contaminate surface or ground waters.

Care for your Land Application System

Your land application system is an important part of your wastewater system. Here are a few things you should do to maintain it:

- Flush driplines regularly – every 3 months recommended
- Plant only recommended wetland plants over and near your wastewater system. Roots from nearby trees or shrubs might clog and damage the drainfield
- Don't drive or park vehicles on any part of your wastewater system. Doing so can compact the soil in your drainfield or damage the pipes, tank, or other septic system components
- Do not build any structures over it or seal it with concrete, asphalt etc
- Keep roof drains, basement sump pump drains, and other rainwater or surface water drainage systems away from the drainfield. Flooding the drainfield with excessive water slows down or stops treatment processes and can cause plumbing fixtures to back up
- Trees with very aggressive roots, such as willows, should be kept well away from the disposal system, see page 11 for list of recommended plantings
- A soggy drainfield won't absorb and neutralize liquid waste. Plan landscaping, roof gutters and foundation drains so that excess water is diverted away from the Land Application System



HOME OWNERS CARE GUIDE

• *In A 'Nutshell'...*

DO...

- If your system requires power supply make sure this remains on continuously, unless system is being serviced
- Check faucets and toilets for leaks; make repairs if necessary
- Use low flush toilets where possible
- Use a 'displacer' to reduce the amount of water needed to flush older toilets
- Use aerators on faucets and flow reducer nozzles on showers to help lower water consumption
- Reduce water levels for small loads of laundry
- Wait until the dishwasher is full to run it
- Densely plant your field to maximise transpiration
- Perform regular monthly visual checks of your system and field
- Grass should be mowed or trimmed regularly to optimize growth and prevent the grass from becoming rank
- Use signs, fences and/or plantings to prevent any vehicle or stock access
- Keep records of all maintenance undertaken on the wastewater systems
- Monitor and care for your Wastewater System as per instructions in the home owner's manual
- You are welcome to install a Waste Master in your kitchen sink. The worms love it!!

DO NOT...

- Switch off power unless servicing
- Use chlorine based disinfectant & cleaning products in the toilets or kitchen sink (Cleaners high in chlorine, phosphorous or ammonia must not be used)
- Over use heavy cleaners that kill beneficial bacteria in the septic system
- Pour any toxic/strong chemicals (paint, oil, grease, paint thinners or pesticides) down any drains
- Flush down your toilet – Dental floss, feminine hygiene products, diapers, cotton swabs, cigarette butts, cat litter, and other kitchen and bathroom items
- Discard any drugs down the sink or toilet
- Empty rubbish bags into Worminator
- Alter or add any part of your system without Waterflow NZ LTD's approval



• *Household Cleaning Chemicals*

Effects on Wastewater and Disposal System Receiving Environments

Use of many cleaning chemicals in facilities served by on-site disposal systems, can result in high concentrations of the constituents in those cleaning agents being discharged into the receiving soils. These chemicals and constituents can have a massive impact on the quality and condition of the receiving soils over time.

Many of the chemicals can disrupt soil structure and decrease hydraulic conductivity while others can act as bactericides, destroying the essential micro-organisms required to achieve the high level of biodegradation in the treatment and disposal systems.

The following matters need to be considered when using cleaning agents in a domestic situation:

- Laundry powders are often extremely high in sodium which will destroy the salt balance in the soils. Check the labels for low sodium and phosphorous contents.
- Wastewater flow from dishwashing machines can have an impact on wastewater treatment systems, in terms of the strong cleaning chemicals used, so check labels for low sodium products
- Highly corrosive cleaners (such as toilet and drain cleaners) that have precautionary labels warning users to minimise direct contact, are an indication that they can adversely affect the wastewater treatment system. Up to 1 cup of bactericides such as bleach can be sufficient to impact on all the microorganisms/bugs in a septic system.

Recommended Cleaning Brands:



earthwise
caring for your world



• *Cleaning Substitutes*

Substitutes For Household Cleaning Chemicals (Ref TP58)

Use of the following readily biodegradable substitutes for common potentially harmful household cleaning chemicals will reduce the stress on any wastewater system, significantly enhance the performance of the whole system and increase the life of the land application system, while reducing the potential effects of the receiving soils.

General Cleaners

Use soft soap cleaners and bio-degradable cleaners and those low in chlorine levels.

Ammonia-Based Cleaners

Instead sprinkle baking soda on a damp sponge. For windows, use a solution of 2-Tbs white vinegar to 1-litre of water. Place the mixture into a spray bottle.

Disinfectants

In preference use Borax (sold in most Bin Inn stores): ½ cup in 4-litres of water.

Drain De-Cloggers

Avoid using de-clogging chemicals. Instead use a plunger or metal snake, or remove and clean trap.

Scouring Cleaners and Powders

Instead sprinkle baking soda on a damp sponge or add 4-Tbs baking soda to 1-Litre warm water. It's cheaper and won't scratch.

Toilet Cleaners

Sprinkle on baking soda, then scrub with toilet brush.

Laundry Detergent

Choose one with a zero phosphate content and low in alkaline salts (in particular, a low sodium level) and no chlorine.

Oven Cleaners

Sprinkle salt on drips, then scrub. Use baking soda and scouring pads on older spills.



HOME OWNERS CARE GUIDE

• **Water Tolerant Plants Suitable For On-Site Wastewater Disposal Systems**

Plantings that will soon have your field looking magnificent!

Below are the most common of native and other plant species that are tolerant or fond of moist conditions, such as those associated with wastewater disposal fields.



*Cordyline
australis*



*Apodasmia
similis*



*Alocasia
nigrescens*



Carex secta

- **Alocasia nigrescens** (Black Taro)
- **Apodasmia similis** (Oioi)
- **Arthropodium Matapouri Bay** (Rengarenga Lily)
- **Carex dispacea**
- **Carex dissita**
- **Carex maorica**
- **Carex secta**
- **Carex tenuiculmis**
- **Carex virgata**
- **Cordyline australis** (Cabbage Tree)
- **Cordyline Midnight Star**
- **Leptospermum Burgundy Queen** (Flowering Ti Tree)
- **Lomandra Tanika**
- **Phormium Surfer**

Note: For a full range of plants and their descriptions please see our website:

www.naturalflow.co.nz





naturalflow

eco-wastewater & sewage systems

by Waterflow NZ Ltd

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Call us today to discuss your needs

0800 628 356

Or for more information www.naturalflow.co.nz



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