# USER INFORMATION AND MAINTENANCE

# **JANUARY 2023 EDITION**





## **Service Provider**

**DURACRETE PRODUCTS (2017) LTD** 

PHONE - 0800 387 227

**AFTER HOURS PHONE - 027 278 4708** 

EMAIL – servicemanager@duracrete.co.nz

SYSTEM NUMBER	DATE OF COMMISSION / /	
---------------	------------------------	--

# **CONTENTS**

1	DE:	<u>SIGN</u>	3
	1.1	VOLUME	. 3
	1.2	LID	. 3
	1.3	ELECTRICAL COVER	. 3
2.		<u>ALARM</u>	3
	2.1	ALARM TYPES	. 3
	2.2	ALARM NOTIFICATION	. 3
	2.3	Who to Call	. 4
	2.4	What to Do	. 4
3.		<u>MAINTENANCE</u>	4
	3.1	Types of Filter	. 4
	3.2	CLEANING THE ARKAL FILTER	. 4
	3.3	Maintenance Servicing	. 6
4.		DESLUDGING	6
	4.1	Sludge	. 6
5.		NOISE	7
	5.1	Blower	. 7
6.		<u>ODOURS</u>	7
	6.1	VENTING	. 7
	6.2	Shock Loading	. 7
	6.3	Bacteria	. 7
7.		IMPORTANT DAILY USE ISSUES	8
	7.1	Do Nots	. 8
	7.2	Some Dos'	. 8
8.		WARRANTY	8
9.		COMMISSIONING	9
	9.1	When to Use	. 9

# 1 Design

### 1.1 Volume

The *CleanStream* Wastewater Treatment System has been designed and tested to work on an average of 1,200 litres per day of wastewater. This averages out at six people contributing 200 litres per person per day. This loading is spread over the day.

### **1.2 Lid**

The top of the tank has a polyethylene lid that is used for easy access into the system. **This lid** is not designed to be jumped on or driven over. This will be slightly above the surface of the surrounding soil to stop water intrusion.

### 1.3 Electrical Cover

The rectangular plastic box houses the blower and all the electrical fittings. This base is 70 mm above finished ground level. Please make sure you do not build the soil up or flooding may occur and damage the electrical fittings and blower. It must not be jumped on. If it is broken or holed, please call the service technician who will need to replace it.

# 2. Alarm

# 2.1 Alarm Types

Installed with the system is a high level alarm for the pump chamber and an air pressure switch to monitor the Blower.

Should your alarms sound, don't panic. Your system is not broken as such. In fact, it is quite the opposite. The alarm is part of your system and if it is sounding the system is working. The alarm is sounding to indicate that the fluid levels withing your tank are reaching a high level.

We like to think of it a bit like a vehicle. The engine warning light will come on to tell you that you have an issue, yet the car still works. Your Cleanstream System is the same as your car, just please don't ignore the alarm warning.

### 2.2 Alarm Notification

If the alarm does activate, press the mute button on the alarm panel to silence the buzzer. Please note that muting the alarm will not reset the system. It will only silence the alarm. The light will stay on. Please note which light is on. Advising the Service Provider of this will within 24 hours (see Warranty Terms and Conditions page 7-8) enable them to diagnose the fault and be more efficient in rectifying it.

### 2.3 Who to Call

Act quickly and call your Service Provider within the first 24 hours. Failure to do so exacerbate the issues which may result in a costly outcome such as a burnt out pump that requires replacement.

### 2.4 What to Do

Until repairs are made (by either the homeowner under the advice of the Service Provider or the Service Provider themselves) limit the amount of wastewater going to the system.

# 3. Maintenance

# 3.1 Types of Filter

The system is fitted with an Arkal filter.

The Arkal filter protects the irrigation line.

The owner is advised to clean their own Arkal filter every 2-4 months. This should be done to ensure effluent flows through the system and is discharged to the irrigation field without restriction.

Alternatively, for a small fee, our Service Technicians can clean the filter for you. Contact us to arrange this.

Protective clothing, gloves and eye protection should be worn at all times during these cleanings.

# 3.2 Cleaning the Arkal Filter

The Arkal filter cleans with a spinning action using a high pressure nozzle on a household hose.

Protective clothing, gloves and eye protection should be worn at all times during these cleanings.

Please refer to diagram 1 below to locate your Arkal Filter.

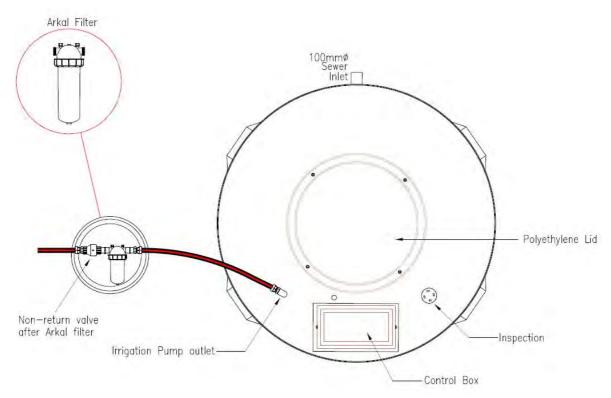
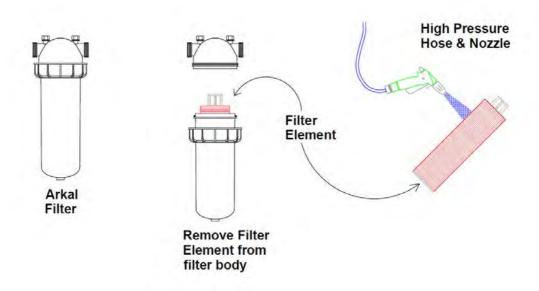


Diagram 1 – Location of Arkal irrigation filter



To clean the filter, follow these basic steps. **Protective clothing, gloves and eye protection should be worn at all times during these cleanings.** 

- i) Turn the power off to the system. This stops the pump operating when the filter is open.
- ii) Remove excess pressure from the system.
- iii) Disassemble the filter by first loosening the locking ring with the plastic wrench provided.

- iv) Remove the bottom portion of the plastic housing exposing the spine on which the discs are stacked. With the cover removed the discs will automatically come free so you can either hose the discs in place by aiming a hose with clean water under pressure at the discs causing these to "spin". This action cleans the discs. The spine is removable, so the discs may be removed if it is more convenient to clean the discs elsewhere.
- v) Install the spine (if removed).
- vi) Replace the cover and locking ring.
- vii) Tighten ring.
- viii) Turn power back on.

https://www.youtube.com/watch?v=3qPjnwCusHM

# 3.3 Maintenance Servicing

An approved *CleanStream* service technician will conduct the two service visits per year. It is important the system is serviced regularly to ensure

efficient performance and reduce the requirement for the costly replacement of mechanical components. After each service you will be given a copy of the service report via email

The service report provided is a summary of the condition of your system on the day of its annual maintenance. It does not guarantee the performance or refer to the condition of the system and its components until the next scheduled service in 6 months time.

# 4. **Desludging**

### 4.1 Sludge

Aerated treatment systems generally require less desludging than standard septic tanks. Remember this is dependent on loadings. For example, the number of people residing in the house will increase the load and may necessitate more frequent desludging.

The Service Provider will advise you if it is necessary to de-sludge.

Any desludging required is at the owner's expense.

Typically, desludging is required every 5-7 years.

# 5. Noise

### 5.1 Blower

The system uses a Gardner Denver LP100 Linear Air Blower. These blowers are virtually silent and they go continually. If you hear any unusual noise, please call your Service Provider.

# 6. Odours

# 6.1 Venting

Please remember it is a natural process using bacteria to digest the organic material in your wastewater. Air exchange into the system occurs through the terminal vent on the house (this vent is usually the highest point on the house and any odour is generally dispersed very quickly) and the mushroom vent on the system itself.

It is also important to remember that your system is a septic tank and holds some pretty smelly stuff. It is also important to remember that as liquid passes into your system from your house, air gets pushed into the system with it. Therefore, air has to get out (the system needs to breathe) so small amounts of odours are unfortunately unavoidable and should not always be treated as a system malfunction.

In the unlikely event of strong odours occurring, discuss any issues with your Service Provider.

# 6.2 Shock Loading

If you go away for a period of time the system gets shock loaded on your return. This is because the bacteria population needs to build up to cope with the increased loadings. This can result in some odours. Likewise if the loading is increased significantly for a short period, such things as large numbers of visitors, the bacteria population increases. Bacteria balance themselves with their food source. This can result in some temporary odours.

## 6.3 Bacteria

Please treat the system as a living entity with lots of different bacteria working for you. **We do not recommend using anti-bacterial products.** 

# 7. Important Daily Use Issues

### 7.1 Do Nots

- Drive over it.
- Use substances that will kill the bacteria. Such as strong detergent, disinfectant, antibacterial handwash, bleach or chlorine-based products such as Napisan.
- Flush sanitary pads, wet wipes, nappies or condoms into the system. Flushing tampons or their packaging into the system should also be avoided because they may cause blockages.
- Damage the irrigation line in any way
- Use garbage disposal units on any septic tank system.
- Never turn off the power to the system.

### 7.2 Some Dos'

- ☑ Call the Service Provider within 24 hours if the alarm is activated.
- ☑ Reduce the amount of wastewater entering the system if an alarm is activated.
- ☑ Call the Service Provider if any part of the system is damaged in any way.
- ☑ Maintain and prevent intrusion of insects, plants and tree roots into the system.
- ☑ We recommend using a liquid laundry detergent, do not use powder.

# 8. Warranty

All Cleanstream Treatment Systems produced by Duracrete have been inspected and tested before leaving the factory.

The standard pump used with the system has a **2 year manufacturers warranty** from date of commission or replacement. Higher specification pumps have a one-year manufacturer's warranty.

All Davey pumps have a thermal sticker on the body of the pump which turns black when pump overheats from working too hard to push water through blocked filters. The Manufacturers warranty does not cover pumps with black stickers (burnt out pump).

All other electrical componentry have manufacturers' warranties of one year.

The concrete tanks are warranted by the manufacturer for a period of five (5) years from the time they leave the factory. During this period any defect which is attributed to the manufacturer will be repaired or replaced free of charge at Duracrete's option.

This warranty does not cover damage caused by the following;

- misuse of the tank
- neglect or damage caused after dispatch from our facility during transportation or installation
- accidental damage
- vandalism

- use of incorrect power supply
- fluctuations in the power supply
- earthquakes, fire, flood, storm, lightening, land slip or other acts of nature
- persons un-authorised by Duracrete interfering with the system in any way
- customer/owner/occupier failure to advise of any warning or other malfunction within 24 hours of the malfunction occurring
- Intrusion by plants or insects
- Burt out pumps due to blocked Arkal filter

Please note - the system is not designed to be driven over by vehicles.

# 9. Commissioning

## 9.1 When to Use

The *CleanStream* Treatment System should not be used in any way until the system has been commissioned. This includes contractors during the construction of the house and owners wishing to take up residency.