



**AlphaTreat**

DP10 TREATMENT PLANT

OWNERS MANUAL

# The Alpha Treat™ Wastewater Recycling System

## Introduction

About 20% of Australian homes are not connected to central sewers i.e. treatment of waste water occurs on-site. It is important to realise that on-site waste water systems require regular inspection and maintenance to ensure that they function effectively.



DP10 TREATMENT PLANT

Your Alpha Treat™ has been tested and accredited by SAI Global to the Australian Standard AS/NZS1546.3 and is approved by various state health and EPA departments across Australia and New Zealand. The system must be operating correctly to ensure that the health of your family and the community are protected at all times.

WES can arrange maintenance service for your peace of mind. It is important that you have signed a contract for the ongoing maintenance of your system. This will ensure that your system continues to operate as designed, warranties are protected and the unit will continue to function correctly in the long term. Generally speaking the Alpha Treat™ is automatic in operation and requires very little owner intervention. It is useful however for you to familiarise yourself with the system so that you understand the general operation of the unit.

**Certified Product**



**AS/NZS1546.3**  
**SMK40052**

Packaged System Weight: 360kg  
Packaged Height: 2450mm

For your nearest SERVICE PERSON please call 1800 607 695.

Alpha Treat DP10 Treatment Plant - Owners Manual V1 March 2016

## Operation

The Alpha Treat™ DP10 Treatment Plant treats waste water on-site to primary and secondary levels far in advance of older style septic tanks. In technical terms the Alpha Treat™ has been designed to process waste water to achieve typically 95% reduction in both suspended solids (TSS) and biological oxygen demand (BOD5). The treated effluent is clear, odourless and can be reused on site (subject to council approval). A household drainage system terminating at an Alpha Treat™ treatment plant does NOT require a grease trap on the kitchen line.

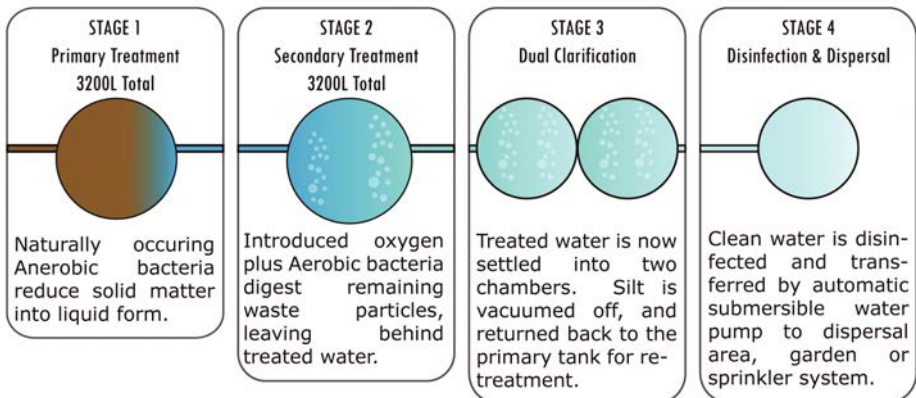
## Treated Water Quality

Alpha Treat™ DP10 Treatment Plant

BOD <sub>5</sub>	10 mg/litre
Suspended Solids	10 mg/litre
Faecal Coliforms	10 cfu/100ml
Free residual chlorine	min 0.5 mg/L, max 2 mg/L

The Alpha Treat™ DP10 Treatment Plant is a compact, Advanced Secondary, sewage treatment system housed in two polymer tanks. It is intended to treat domestic waste water from single households with adequate capacity to treat waste water for up to 10 people. The tank is connected to the household plumbing system and requires electrical power to be supplied for the air blower, electronic alarm control unit and the irrigation pump.

## The Process



# Owners/Tenant Responsibilities

The home owner is responsible to the local authority for ensuring that their waste treatment process is operated correctly and produces a good quality discharge.

- The unit should NEVER be turned off, even during holiday periods. To cope with extended periods of absence, contact your service agent.
- The treatment system is engineered to meet normal household water discharge levels. If large amounts of water are discharged to the system it can affect the amount of process time and result in lower quality treatment. Please ensure that washing machine loads are spread over several days if possible.
- Do not dispose of fats, greases or large amounts of household food scraps down the drain as this can overload the system's process of digestion.
- Do not dispose of solvents, paints, strong cleaning agents (chlorines, bleaches, disinfectants etc.) or other chemicals down household drains. These are toxic to the microbiological process working inside the system. Try to use natural cleaning products and use disinfectants sparingly. Try to utilise cleaning products that are low in phosphorous as it is far better long-term for the environment.

All Alpha Treat™ systems are fitted with a visual warning strobe light on top of the electrical control box and a mutable alarm panel that is located inside the house (Laundry suggested when required by local authorities).

If this light is activated, it indicates either:

1. The aeration system is not operating correctly.
2. The system water level is too high.

Before contacting your service agent, please check:

1. That the irrigation outlet from your system is not kinked or blocked.
2. That there has been no disruption to power that could have caused the electrical breaker within the control box to trip (electrical storms, etc.).

If there is no obvious cause for the alarm, contact your service agent.

See section 30 of service manual procedures

<http://www.wastewaterequipment.com.au/treatment-plant/domestic-systems>

# Owners/Tenant Responsibilities (Continued)

- WES can suggest a maintenance person in your area if required, or contact your local council for a full list of licensed personnel.
- The owner/tenant of the property should ensure safe passage for the Service Technician. Any animals that may pose a danger to the service technician should be locked up or penned during servicing.
- The owner/tenant should provide a key for the Service Technician if there are any locked gates which prevent entry to your property.
- The owner/tenant should ensure that the area around the Alpha Treat™ System is kept neat and tidy at all times.
- The owner/tenant should monitor the irrigation sprinkler system to ensure all spray jets are working properly. (The owner/tenant will be required to replace or clear any blocked or broken sprinklers). This work can also be arranged to be completed by a maintenance technician.
- The owner/tenant should ensure that any inline filters on the irrigation sprinkler system are checked and cleaned on a regular basis if required. The service technician will clean the filter every three months.
- The owner/tenant should ensure prompt payment of any service or repair accounts.
- The owner/tenant should not allow painters/cleaners etc. to dump paint chemicals etc. into the drains whilst working on site.
- If you have any questions in regards to servicing your system please contact us during business hours on 1800 607 695.

**A full Operation, Installation and Service manual can be downloaded from:**

**<http://www.wastewaterequipment.com.au/treatment-plant/domestic-systems>**

**For information regarding correct environmental maintenance, please refer to Lanfax Laboratories' online knowledgebase at:**

**<http://www.lanfaxlabs.com.au/laundry.htm>**

# Alpha Treat™ DP10 Aerobic Treatment Tank

Partition Optional pending state regulations

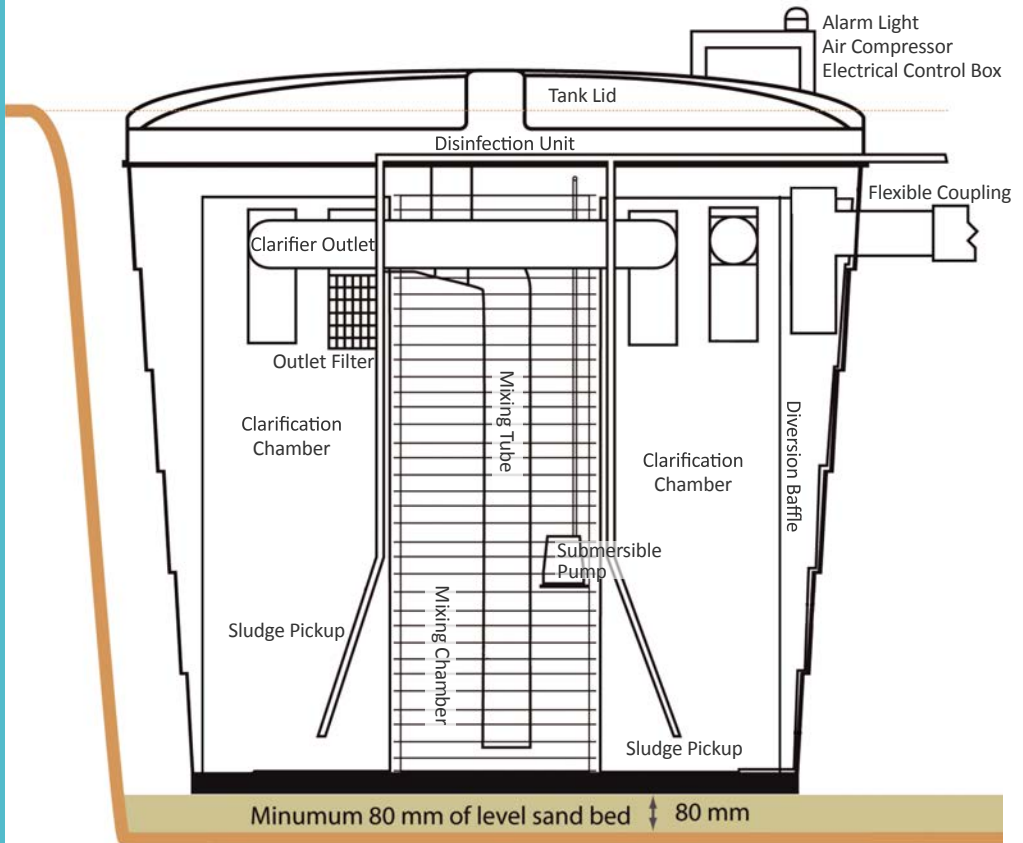
## Excavation Dimensions

Depth Approx. 1980mm

Width Approx. 2600mm

Length Approx. 4900mm

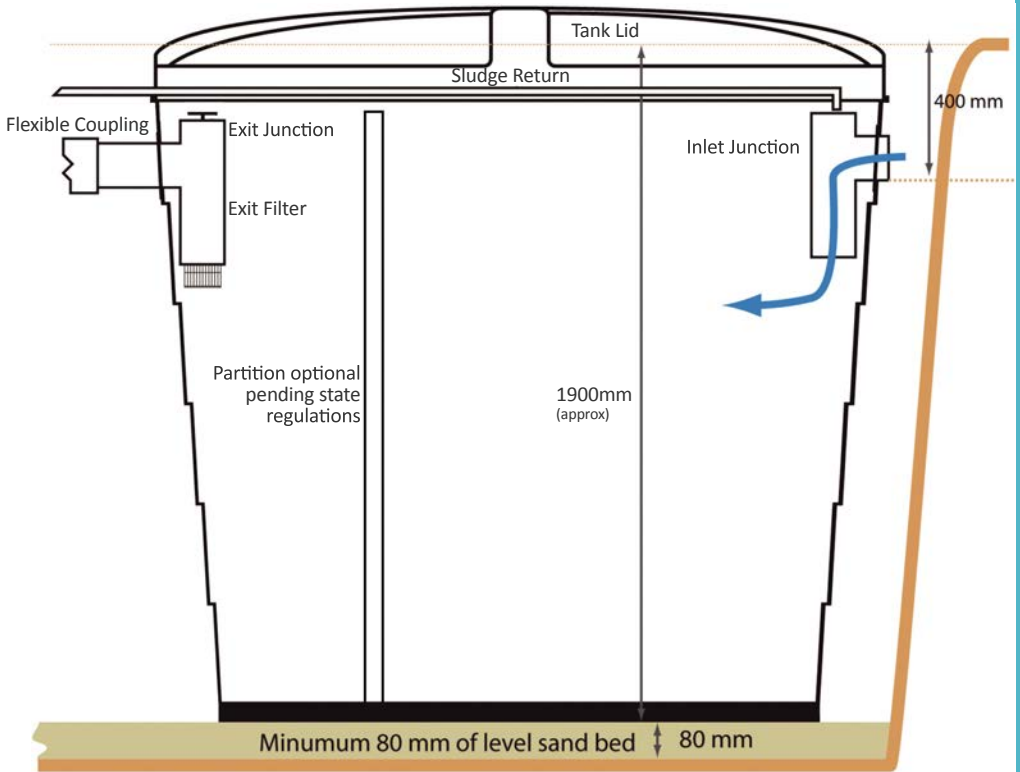
(Measure tank at base level)



For your nearest SERVICE PERSON please call 1800 607 695.

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# Alpha Treat™ DP10 Primary Treatment Tank

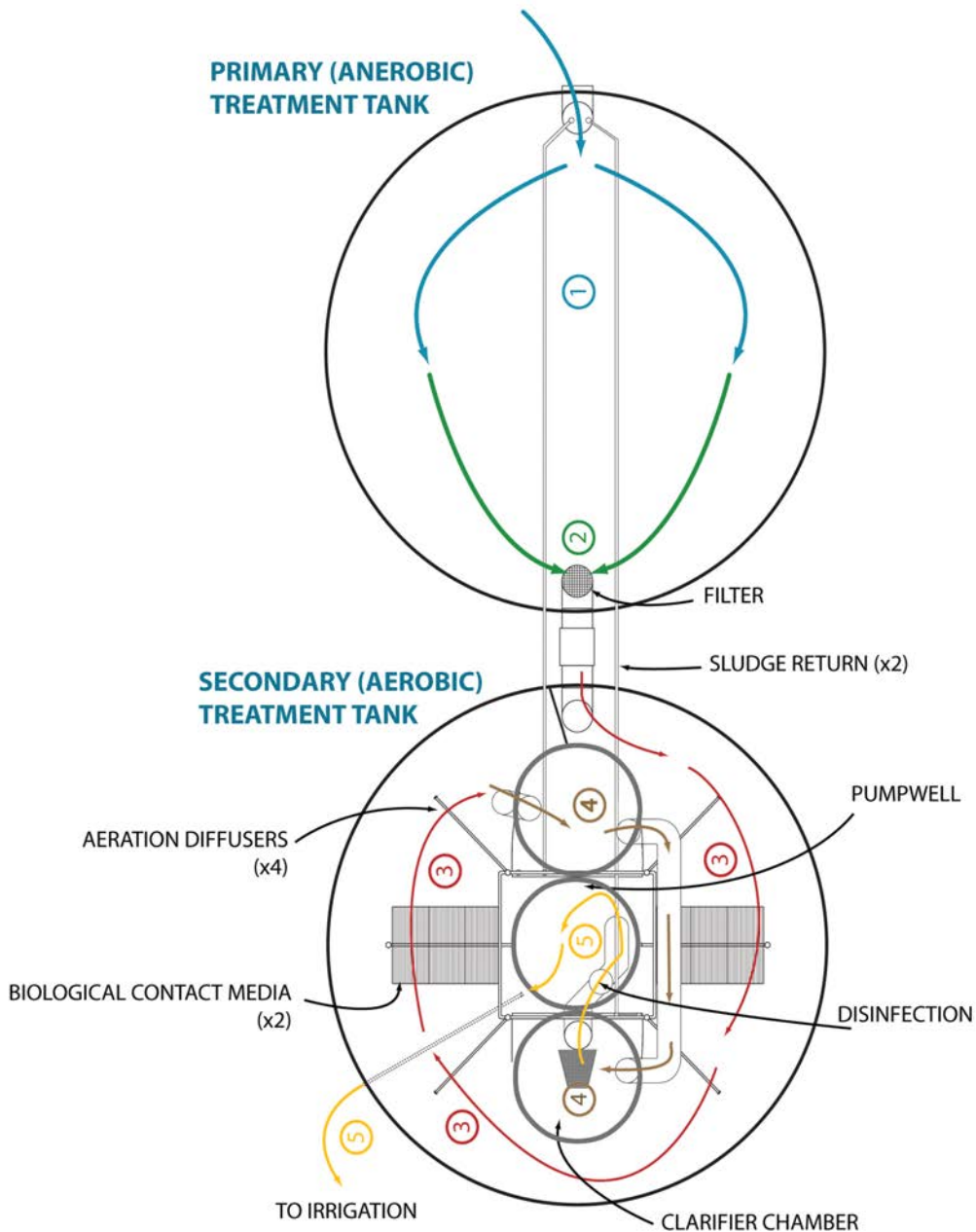


# Alpha Treat™ Treatment Process

The Alpha Treat™ 10 Person Treatment Plant is an Advanced Secondary aerated treatment tank system which uses totally natural biological processes to treat the waste water. It consists of a set of 5 chambers which perform various treatment processes on the waste stream.

- 1 Water first enters the primary pre-treatment chamber where organic and inorganic solids settle to the bottom and fats and other floating matter forms a scum layer on top of the liquid in the chamber. A sludge layer builds up in the chamber and a biological process takes place i.e. anaerobic bacteria digest the sludge and break down some of the organic matter.
- 2 Fluid is decanted from the pre-treatment chamber through a baffle or filter to eliminate the passage of grease and floating matter. Whenever liquid enters the pre-treatment chamber, waste water flows by hydraulic displacement into the aeration chamber.
- 3 In this chamber air is introduced through fine diffusers which serve to stir the contents of the tank whilst some air dissolves to provide oxygen for aerobic bacteria to thrive. These bacteria form as a bio-film on the submerged media and float in the solution. Aerobic bacteria are far more efficient than their anaerobic counterparts and the effluent is converted into clean, clear water through aerobic digestion and oxidisation. This process is odour-free.
- 4 Liquid from the aeration chamber flows into the clarifiers where the solution slows to enable any suspended particles to settle to the bottom. Periodically the accumulated sludge is returned to the primary treatment chamber to ensure more complete digestion. This return process is automatic.
- 5 Treated water now flows through a lower chamber where it is chlorinated before passing into the final irrigation area. At this point clean waste water is automatically and silently discharged into the land application system. Land application systems vary according to individual situations and can be in the form of surface sprinklers, subsurface irrigation, sand filters or other innovative systems. Your local council will decide this.





An optional Nutrient Reduction filter is also available to further improve nitrogen and phosphorous discharge if required.

# Alpha Treat™ DP10 Treatment Plant Warranty

Congratulations! You have made an excellent choice of this quality product. Our commitment to quality also includes our service. Should you, contrary to expectations, experience defects due to manufacturing faults, WES will provide you with a warranty against defects as follows:

## Warranty

The Alpha Treat™ 10 Person Treatment Plant is guaranteed to be free from defects in workmanship and parts for a period of:

- 15 years on tank casings
- 2 years on electrical components (including air pump, submersible pump)
- 3 years on other system components

from the date of installation.

Defects that occur within this warranty period, under normal use and care, will be repaired, replaced or refunded at our discretion. The benefits conferred by this warranty are in addition to all rights and remedies in respect of the product that the consumer has under the Competition and Consumer Act 2010 and similar state and territory laws. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

## Proof of Purchase & Registration

This warranty is valid for the original purchase and is not transferable. Please keep your installer tax invoice or receipt as proof of purchase, and as proof of date on which the installation was made. Under local state health department requirements, the homeowner must register with WES, the Alpha Treat™ 10 Person Treatment Plant installation by sending the required details to:

Wastewater Equipment Supplies (WES) PTY LTD

9 Mackie Way, Brendale QLD 4500

Phone 1800 607 695 | Fax 07 3205 7155 | Email [info@wastewaterequipment.com.au](mailto:info@wastewaterequipment.com.au)

## Extent of Warranty

This warranty is limited to defects in workmanship or parts only. All defective products or parts will be repaired or replaced, at the discretion of WES.

## Exclusions

This warranty does not cover:

- Normal wear and tear to the product or parts.
- Any defects caused by an accident, misuse, abuse, improper installation or operation, lack of reasonable care, contamination of the system by the entry of prohibited chemicals and substances into the system, unauthorised modification, loss of parts, tampering or attempted repair by a person not authorised to service the treatment plant.
- Any product that has not been installed correctly. Installation is not covered by this warranty. Please contact your installer if installation issues arise.
- Product not operated or maintained in accordance with the manufacturer's operating instructions provided with the product.
- Any product that has non-specified replacement parts used.
- Any product that has been used for purposes other than domestic use.
- Regular maintenance and system tuning, service, and consumables.
- The cost of transportation of the product from customer to distributor or from distributor to the customer

## To Make a Claim

To obtain service under this warranty or to have the product repaired please contact the WES Helpline 1800 607 695 with your treatment plant serial number (proof of installation tax invoice) and the completed Registration Details Certificate. If you require assistance regarding the warranty conditions or have technical enquiries about your product, please contact our customer service helpline 1800 607 695

For your nearest SERVICE PERSON please call 1800 607 695.

# Registration– Alpha Treat™ DP10 Treatment Plant

**IMPORTANT** To validate your warranty; fill out the following information and sending a copy to WES.

Under local state environmental health authority requirements, the homeowner must register the Alpha Treat™ DP10 Treatment Plant installation with WES.

Send the following required details to:

Wastewater Equipment Services (WES) Pty Ltd  
9 Mackie Way  
Brendale QLD 4500  
Phone 1800 607 695 | Fax 07 3205 7155 | Email [info@wastewaterequipment.com.au](mailto:info@wastewaterequipment.com.au)

Alpha Treat™ Treatment Plant Serial # \_\_\_\_\_

Owner Name: \_\_\_\_\_

Site Address: \_\_\_\_\_

\_\_\_\_\_ State: \_\_\_\_\_

Email: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Retailer Name: \_\_\_\_\_

Retailer Address: \_\_\_\_\_

Plumber/Installer: \_\_\_\_\_

Plumber Lic No: \_\_\_\_\_

Installer Tax Inv No: \_\_\_\_\_

Installation Date: \_\_\_\_\_

Electrical Installer: \_\_\_\_\_

Electrician Lic No: \_\_\_\_\_

Local Authority / Council: \_\_\_\_\_

Service Technician: \_\_\_\_\_

Service Tech Ph No: \_\_\_\_\_

We recommend that you attach a photocopy of your receipt, showing the date of purchase, to this Registration Certificate and keep for your reference. In the event of a product fault, please call your service technician for immediate assistance. Please ensure that you have the product details (as shown on this card) at hand so that we are able to respond as quickly and efficiently as possible.

All information contained within this manual is the property of WES.

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