OASIS TEXASS 2000-3000

(TEXTILE ADVANCED SEWAGE SOLUTION)

OWNER OPERATION& INSTALLATION MANUAL

TABLE OF CONTENTS

PLEASE READ

We urge you to fully read this Manual. The contents are important to your safety and the operation of the TEXASS (Textile Advanced Sewage Solution).

Keep this Manual with other important household manuals for future reference.

If you have questions regarding the safety and operation of your TEXASS (Textile Advanced Sewage Solution), contact your local Authorised Service Technician.

- Do not attempt to service components of the system yourself; call your local Oasis Distributor or Service Agent.
- Only Authorised Service Personnel are to remove covers on the Treatment System.

SECTION 1

INTRODUCTION

Thank you for choosing the TEXASS (Textile Advanced Sewage Solution) for your property.

The TEXASS is one of the finest trickling filtration packed bed reactor Wastewater Treatment Systems available today.

Our System converts the sewage from your residence or business into a clear odourless liquid. The high degree of treatment is accomplished at a remarkably low operating cost per month.

SECTION 2

HOW THE TEXASS (TEXTILE ADVANCED SEWAGE SOLUTION) WORKS

Why this Technology is so effective

- The system comprises a pre-treatment chamber feeding to a secondary treatment chamber. Further biological and mechanical filtration occurs by the use of the revolutionary ZABEL A300 high performance filter, prior to TEXASS textile filtration chamber. Oasis Clearwater has perfected the textile filtering system that efficiently cleans the effluent through recirculation. After passing through solids settling small particle filtering compartments the effluent is pumped and sprayed several times through the unique textile filter.

- Each pass cleans the liquid further until it is at the appropriate quality for discharge through the irrigation system. The resulting irrigation water easily exceeds both the New Zealand and Australian stringent standards for the disposal of wastewater.

The system is controlled by a high quality PLC (programmable logic controller) with audio-visual alarm detection for system operation and malfunction.

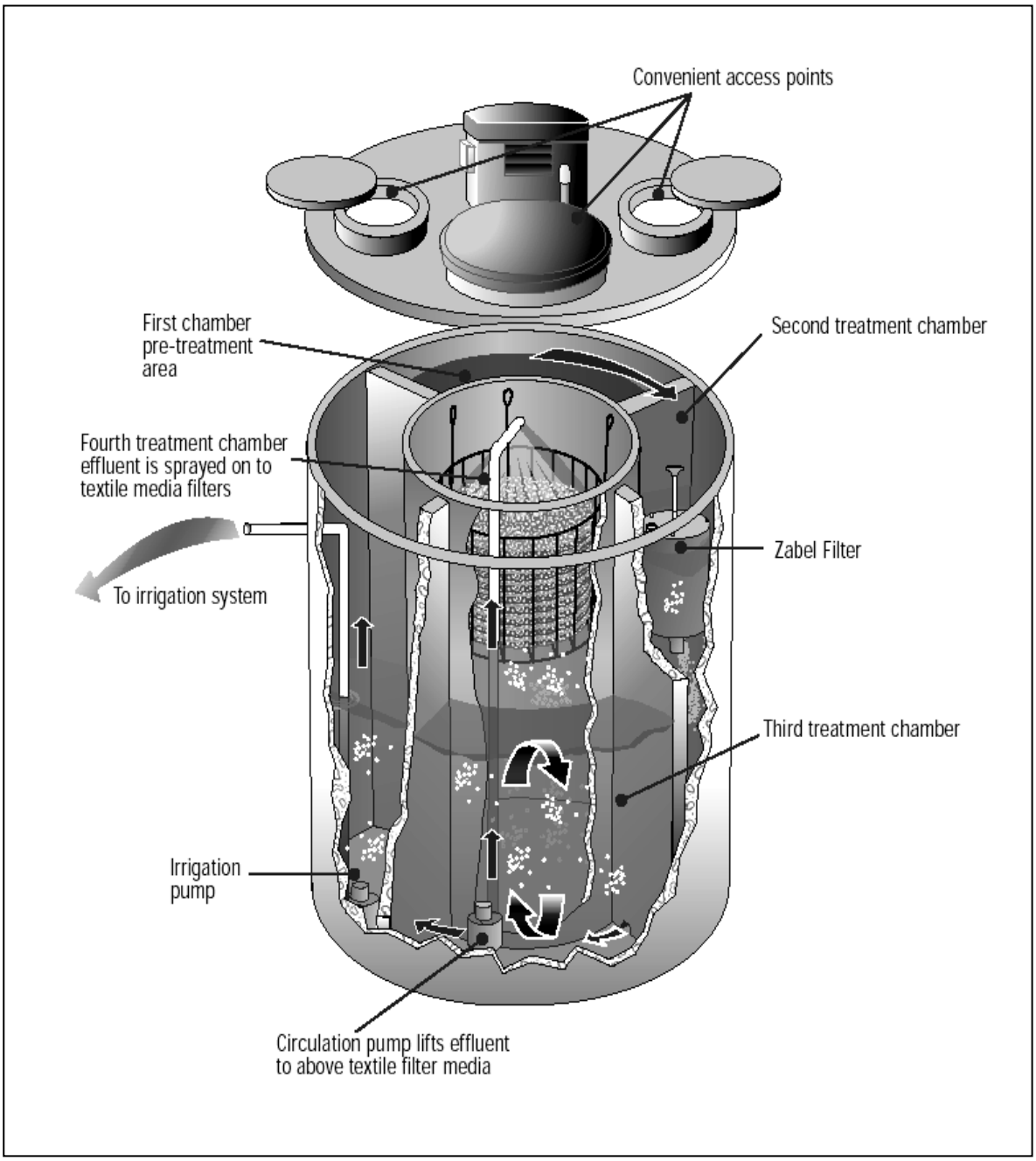


Diagram of TEXASS (Textile Advanced Sewerage Solution)

SECTION 3

INTRODUCING PRODUCTS INTO THE SYSTEM

Introducing harmful products into the system may reduce the efficiency of the system or stop the treatment process by destroying the biomass. These products that reduce the efficiency or stop the treatment process can be grouped into two groups, prohibited substances and limited-use substances. While the wastewater treatment system will process most waste produced by the average household, the following information will maximise the system's efficiency and reduce the time period between primary chamber pump-outs.

NOTICE: Introducing harmful or damaging chemicals into your TEXASS System may void the Warranty.

A. Prohibited Substances:

Prohibited substances are those substances which, when present in even small amounts will prevent the system from providing wastewater treatment. Substances that will not dissolve may clog and possibly damage the unit. **DO NOT** introduce the following prohibited substances into your TEXASS System:

- Plastic or rubber products, petroleum products, such as motor oil, paint, paint thinner, petrol and solvents.
- Non-biodegradable products, such as sanitary napkins, condoms and disposable napkins.
- Toxic substances such as pesticides, strong disinfectants and strong caustic drain cleaners.
- Large amounts of paper products, such as paper towels and synthetic fibre-reinforced products advertised as having "wet strength".
- Animal fats, such as bacon grease or lard (normal cleaning of pots and pans is acceptable).

Chemicals

The following chemicals are prohibited substances and **should not be** poured into the Treatment System:

- Herbicides
- Pesticides
- Paint Thinner
- Motor Oil

Have you read the "Essential Guidelines"?

(enclosed with your system information)

B. Limited-Use Substances:

Limited-Use substances in large concentration will reduce or stop the treatment process. The same substances in smaller concentrations will have no harmful effect on the treatment process. You may use the following substances without harming your TEXASS Treatment System if you use the substance according to the manufacturer's directions. Use the substances **SPARINGLY**, and do not introduce concentrated doses into the system.

- Bio-degradable laundry powders
- Laundry Bleach
- Detergents with Bleach
- Household cleaners containing sodium bactericides such as:
    - Pine oil (disinfectant used in general purpose liquid cleaners)

- N-alkyl dichlorobenzyl ammonium chloride (disinfectant used in detergents and spray cleaners)
- Sodium hydroxide (lye-chemical used in drain openers and cleaners)
- Sodium dichlor-s-triazinetrione (powdered bleach used in scouring powders and automatic dishwasher detergents)
- Ortho-phenylphenol (bactericide used in tub and toilet bowl cleaners)

Waste Food

Some food waste, whether or not it is run through a waste grinder will not be treated by the system, but will remain in solid form and fall to the bottom of the septic tank. Therefore, you should consider not using a waste grinder system, or disposing of these food items through the TEXASS Wastewater Treatment System:

- Animal Bones
- Melon Rinds
- Corn Cobs
- Pips and Seeds
- Eggshells
- Any other non-edible food waste

C. Acceptable Substances:

Substances that are considered to be typical domestic wastewater are human waste, bath and dish water and edible food waste.

The following substances may be used regularly without harming your TEXASS Wastewater Treatment System:

- Laundry detergents without bleach
- Dishwashing detergents without bleach
- Toilet Paper
- Household cleaners containing sodium bicarbonate, sodium carbonate and sodium borate.

SECTION 4

SYSTEM MAINTENANCE AND MONITORING

The TEXASS (Textile Advanced Sewage Solution) operates automatically and intermittently. The maintenance procedures for the user of the system include keeping the vents and the housing clear of debris. The homeowner should monitor the status of the system, substances introduced into the system, and the frequency of required pump-out as determined by the service provider.

If the instructions in this manual are carefully followed, the TEXASS (Textile Advanced Sewage Solution) will provide years of service.

For the homeowner, operational procedures for the TEXASS (Textile Advanced Sewage Solution) are minimal. Normal operation of the unit requires intermittent operation and regular discharge of wastewater from the unit. Rubbish must not be allowed to enter the system. All alarm signals are programmed into the PLC.

Your TEXASS (Textile Advanced Sewage Solution) can be furnished with a service policy, which includes 2-3 inspection/service calls per annum to ensure proper operation of the system. During these service calls, the authorised service person will check for proper operation and perform preventative maintenance including lubrication, cleaning, and inspection of the control PLC. The service provider will also measure the solids level in the septic tank and recommend pump-out when necessary.

PRIMARY CHAMBER

Periodically, waste will need to be removed from the primary chamber using normal pump-out procedures. Only persons experienced in wastewater treatment or service are authorised to remove the chamber cover.

ALARM WARNING

The System is equipped with a red system status light on the control panel and an audio alarm. Should the red light flash and the alarm activate, check the breaker to ensure it has not tripped. If the breaker has tripped, attempt to reset it. If the breaker fails to remain reset, call your Service Technician. The alarm may be shut off by pushing the OFF button. Pushing the OFF button will not reactivate the unit. It will only silence the alarm.

If your house is without electricity, call the electric company. If the electricity is off more than 48 hours, call your Service Technician as well, for treatment system advice.

If your house has electricity, but the blower is not operating, follow the procedures given under ALARM WIRING.

FLOODING

Flood water may cover the septic unit, the blower housing, or both, if the System is installed in a low-lying area.
DANGER: Electrical equipment located in flooded areas presents an electrical hazard. Should the unit become flooded, call your Service Technician. Stay out of the flooded area.

EVALUATION OF SYSTEM PERFORMANCE

The TEXASS (Textile Advanced Sewage Solution) operates automatically and intermittently. There are no operating procedures for the user of the System to perform. However, as with any home appliance or equipment, simple periodic checks should, and can be made to aid in the prevention of costly repair problems which can lead to costly repairs. Generally, the wastewater treatment system unit can be checked by sight and smell.

The TEXASS (Textile Advanced Sewage Solution) is an odour-free system. Therefore, there should be no “septic” smell associated with the system. If such smell is noticed contact your Service Technician.

VISUAL EVALUATION

Wastewater backup is characterised by wastewater flowing back into the house or slow movement of wastewater in the drains. This may indicate a problem with your wastewater treatment system unit. Identify where the backup is occurring within your home’s plumbing system. If no material is blocking the drain, contact your Service Technician.

IF SYSTEM NOT USED FOR AN EXTENDED PERIOD

The TEXASS Wastewater Treatment System will function normally even if wastewater does not enter the system for 5 days. The power to the system should be left on during short periods when there is no wastewater flow to the system. If the system will not be used for several months or longer, you should contact your Service Technician so the system can be checked for proper operation and serviced if necessary. A slight odour may be detected for a couple of days while the system returns to normal operation.

SECTION 5

LIMITED WARRANTY

Oasis Clearwater Systems warrants each TEXASS Textile (Textile Advanced Sewage Solution) to be free from defects in material and workmanship for a period of two (2) years from the date of sale to the ultimate consumer when properly registered with Oasis Clearwater Systems. Oasis Clearwater System’s sole obligation under this warranty is as follows: Oasis Clearwater Systems shall fulfil this warranty by repairing or exchanging any component part, ex factory, that shows evidence of defects, provided said component part has been paid for and the warrantee has notified Oasis Clearwater Systems of the defect complained of, and the component is returned through an authorised Distributor, transportation prepaid. There is no informal dispute settlement available under this LIMITED WARRANTY.

No warranty is made as to the field performance of any system. This LIMITED WARRANTY applies only to the parts manufactured by Oasis Clearwater Systems and does not include any portion of the plumbing, drainage or installation of the systems, and does not include any travel or labour. Accessories supplied by Oasis Clearwater Systems, but manufactured by others, are warranted only to the extent of and by the terms and conditions of the original manufacturer’s warranty. In no event shall Oasis Clearwater Systems be responsible for delay or damages of any kind of character resulting from, or caused directly or indirectly by, defective components or materials manufactured by others.

Recommendations for special applications will be based on the best available expertise of Oasis Clearwater Systems and published industry information. Such recommendations do not constitute a warranty of satisfactory performance.

This LIMITED WARRANTY extends to the ultimate consumer of the product. As herein, “ultimate consumer”, is defined as the purchaser who first has the plant installed, or in the case of a system designed for non-permanent installation, the purchaser who first uses the system. It is the purchaser’s or any sub-vendee’s obligation to make known to any other consumer, the terms and conditions of this warranty.

This warranty is a LIMITED WARRANTY and no claim of any nature shall be made against Oasis Clearwater Systems unless and until the ultimate consumer, or his legal representative, notifies Oasis Clearwater Systems in writing of the defect complained of and delivers the product and/or defective part(s), freight prepaid, to Oasis Clearwater Systems or an authorised service agent.

Oasis Clearwater Systems reserves the right to revise, change or modify the construction and design of the TEXASS Textile Advanced Sewage Solution, or any component part or parts thereof, without incurring any obligation to make such changes or modifications in equipment previously sold. Oasis Clearwater Systems also reserves the right, in making replacements of component parts under this warranty, to furnish a component part which, in its judgement is equivalent to the part replaced.

SECTION 6

Management Plan

A. CONTACT DETAILS:

Manufactured by	**Oasis Clearwater**	**Date**	
System Type:	**Texass Textile PBR**		
Designed By:		Installed By:	
Contact details:		Contact details:	
		24Hr Contact No.	

B. DESIGN DISCHARGE VOLUME:

Tank	**Volume (Lt)**	**Tank**	**Volume (Lt)**
Primary	**2,200**	Circulation	**2,200**
Secondary	**1,100**	Aerobic + PBR	**2,500**
		Pump Out	**1,000**
Total Operating Volume	**7450**	Spare Capacity	**1950**
Total Holding Volume	**9400**	Design Capacity	**10 People - 1800**

C. PROCESS FLOW DIAGRAM: Attach Drawing 1.

D. PROCESS DESCRIPTION:

Process Type	**Textile PBR**	Other Devices:	
House Design Volumes		Flow Meter	
Drip Loading Rate		Splitter Device	
Drip Area		UV Protection	

This plant is constructed in two configurations one multi-chambered concrete tank or two multi-chambered plastic tanks and has a nominal holding capacity of 10,500 litres. The tank contains the following chambers:

FIRST PRIMARY CHAMBER (anaerobic and septic)

This chamber has a capacity of 2,200 litres. All domestic wastewater from the dwelling is piped to this chamber. Here, anaerobic and other oxidising bacteria break down suspended solid material.

The anaerobic digestion achieves a reduction in biochemical oxygen demand (BOD) in this chamber by up to 40%. This chamber also receives activated aerated sludge from the recirculation chamber that stimulates the bacteria and enhances the level of solids digested. It also aids de-nitrification.

SECONDARY PRIMARY CHAMBER (anaerobic and septic)

This chamber has a capacity of 1,100 litres. The domestic wastewater is able to flow freely from the first primary chamber into this chamber. This allows for mixing of the partially treated wastewater and prepares it for the processes that follow. This wastewater passes through a proprietary Zabel A100 filter before entering the recirculation chamber.

RECIRCULATION CHAMBER

This chamber has a capacity of 2200 litres it contains the recirculation pump and head works, the treated water from the PBR and aeration chamber is split to allow further passes across the PBR with a proportion split to the irrigation chamber all controlled by PLC.

Most of the remaining particles of suspended solids settle to the bottom of the chamber allowing largely clean odourless wastewater to pass to the pumping chamber.
The suspended solids that sink to the bottom of the chamber are drawn back to the first primary chamber for further processing.

AEROBIC CHAMBER (aeration and oxygenation)

This chamber has a capacity of 2,500 litres. The semi-treated wastewater is pumped from the recirculation chamber to the PBR chamber through a spray nozzle. The oxygen for this chamber is supplied via the nozzle and the trickling filtration process.

The PBR chamber contains close cell foam-block media. The media block is a porous mesh in square block form; packed together to produce a large surface area. These blocks attract and enhance the bacteria, nitrobacteria and nitrosamines that replenish free oxygen.

In addition to the ammonium contained in many wastewaters, the foam-block media concentrates other compounds and metals contained in the wastewater during the ion exchange processes. The enhanced aerobic bacterial action results in a high level of aerobic treatment and a reduction in the accumulation of biological sludge.

PUMPING CHAMBER

This chamber has a capacity of 1000 litres. The fully treated wastewater flows into the pumping chamber where it is pumped out at pre-set rates for dose loading onto irrigated gardens, landscaped, or other suitable areas. The pumping chamber of the plant will be set up to dose load the subterranean land disposal area upon the accumulation of 200 to 400 litres between each dose loading or once daily which ever is the greater frequency.

E. SITE PLAN: Attach Drawing 2.

F. WASTEWATER TREATMENT SYSTEM MAINTENANCE:

Service Agent		**Contact Numbers**	

See Attachment 1 –Service Agreement Contract
Attachment 2 – Service Report Form

To summarise:

- The owner should regularly (every 4 to 6 weeks) inspect and if necessary clean the pump out chamber filter.
- The complete system should be serviced every 6 months by a suitably qualified service agent.

G. WASTEWATER DISPOSAL FIELD MAINTENANCE:

Field maintenance is to be carried out as per 6 monthly service check list contained in Service Report Form.
Owner to ensure adequate coverage of dripper lines on a regular basis.

H. PREVENTATIVE MAINTENANCE WORKSHEETS:

See Attachment 2 – Service Report Form

I. MONITORING AND REPORTING REQUIREMENTS:

The system is to be serviced every 6 months and a copy of the Service Report (Attachment 3) to be sent to the Local Council for their records or according to
local by-Laws. A copy is to be kept by the property owner and by the service agent.

Local Council	
Address	

J. CONTINGENCY PLAN / TROUBLE SHOOTING GUIDE:

See Service and Installation Manual section 4

K. EDUCATIONAL MATERIAL OF ROUTING PRECAUTIONS:

See this Owners Operation Manual section 3 and “Essential Guidelines”.

L. REGULATORY DOCUMENTATION:

Please attach any relevant regulatory documentation.

Attachment 1

Oasis Clearwater
ENVIRONMENTAL SYSTEMS
WASTEWATER TREATMENT ENGINEERS

Service Contract / Renewal Advice

This agreement is made between (Owner / Occupier)……

of (Address)……..…..

and the Authorised Distributor or their duly appointed agent.

Oasis Clearwater Systems' Authorised Distributor or their agent, upon payment of the sum of $..... + GST and the signature of the afore-named person at the place indicated below, and upon acceptance of this application by a duly authorised employee of the Authorised Distributor, agrees, for the period indicated to the following:

1. Field service inspections will be made by a factory-trained employee during the twelve month period covered.
Inspections include:

(a) Any adjustment, cleaning and field service of the unit necessary for proper operation.
(b) Inspection of all electrical and mechanical componentry Telemetry monitoring (where fitted).

2. Both labour and materials will be charged for any emergency service call outside the calls specified above.

3. In the event of any repairs being necessary on mechanical or electrical equipment because of damage which has occurred outside the warranty, then these repairs will be charged to include both labour and materials. This also applies after the expiry of the two year warranty on the system.

4. All repairs are on a strictly C.O.D. basis

5. This agreement does not bind Oasis Clearwater Systems or its duly appointed agent to be responsible for the quality of the effluent. However, it will at all times whenever possible, recommend how the effluent quality can be maintained at it's maximum and alter and adjust the system during these regular visits in an endeavour to obtain the best possible effluent standards.

In applying for this agreement, the undersigned acknowledges that this Agreement is binding while they are owner/occupier of the premises. There is an obligation by the Authorised Distributor and home owner to transfer this contract to any new owner/occupier to comply with the relevant health legislation, until a new contract is negotiated with the new owner/occupier.

I apply for the above Agreement and submit the sum $.....

Please send back blue copy with remittance. ……...
(Owner/occupier's signature)

Accepted the …… Day of ……., 20… …

BY:……..…… * Provided there is proper access at the time of inspection

Attachment 2

Oasis Clearwater
ENVIRONMENTAL SYSTEMS
WASTEWATER TREATMENT ENGINEERS

FIELD SERVICE REPORT

RESIDENTIAL & COMMERCIAL WASTEWATER TREATMENT SYSTEMS

Date / / **Time** _____ **Serviceperson** _____ **Council** _____

Customer _____

Address _____

SYSTEM TYPE **Septic** ☐ **S2000 / SAF** ☐ **TEXASS** ☐ **MBR** ☐ **Other** ☐

REASON FOR VISIT **Service** ☐ **Call Out** ☐ **Commissioning** ☐ **Other** ☐

Control Box / Electrical	
Check Function	[ ]
Air Pump	[ ]
Air Filter Check & Clean	[ ]
Alarm Light & Buzzer	[ ]
Remote Alarm	[ ]

Irrigation Pump Chamber / Tank	
Pump(s) Check & Clean	[ ]
Alarm Float	[ ]
Effluent Clarity	[ ]
Chamber Clean & Desludge	[ ]
Filter(s) Check & Clean	[ ]

Primary Septic Chamber / Tank	
Scum Layer	_____ cm
Biological Activity	[ ]
Effluent Filter(s) Check & Clean	[ ]
Desludging required	[ ]

General	
Insect Infestation	[ ]
Odours	[ ]
Flooding	[ ]
Landscaping / Tank Access	[ ]
Meter Reading	_____ m^3

Secondary Treament Chamber / Tank	
Sludge Build Up	[ ]
Biomass Growth	[ ]
Liquor Quality	[ ]
Output Clarity	[ ]
Sludge Return	[ ]
Distribution Manifold	[ ]
SAF/PBR/MBR Functioning	[ ]
Blower Functioning	[ ]
Pump(s) Check & Clean	[ ]

Disposal Field	
Dripper Functioning	[ ]
Flush Dripline	[ ]
Air / Vacuum Valves	[ ]
Bark / Mulch / Soil Cover	[ ]
Planting	[ ]
Ponding / Bogging	[ ]
Field Performance	[ ]
Exposed Tubing	[ ]
Vehicle / Stock / Other Damage	[ ]

NOTES

MATERIALS USED

Qty	Description

Travel _____ kms **Hours** _____

NOTE: As part of Regional and/or Local Council consent compliancing of Onsite Wastewater Treatment Systems, servicing is required at the consented service interval. A copy of this form will be sent or made available to the appropriate consenting authorities.

SECTION 7

TROUBLE SHOOTING

PROCESS FAILURE

Process failure from oxygen starvation of the biomass and trickling filtration process:

If the biomass is starved of oxygen, the typical odours associated with anaerobic bacterial treatment will be noticed. This is caused by insufficient air flow into the biological zone. A blockage or pump failure is the most probable cause.

a) The pumps are equipped with an inlet screen. If this screen becomes blocked with debris, it could cause oxygen starvation of the biomass. The pump inlet screen should be checked every 6 months and replaced as needed.

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
The indicator light on the control panel is flashing and the audible alarm is on. All fault codes appear on the PLC screen		Read fault message and respond to message on screen.
Fault message reads high level in recirculation chamber	Pump or float failure	Check pump and float for operation. Check inlet screen for blockage
	Spray nozzle blocked	Clear and clean
	The system is flooded.	Determine cause of flooding and correct
	Sequential valve not operating.	Check for operation and correct flow patterns.
	Circuit breaker tripped	Investigate overheating (i.e. internal thermal overload protection), short-circuiting, or other electrical failure (i.e. bearing failure) and correct.
Fault message reads high level in irrigation chamber	Pump or float failure	Check pump and float for operation. Check inlet screen for blockage
	Filter blocked or frozen	Clear and clean
	Circuit breaker tripped	Investigate overheating (i.e. internal thermal overload protection), short-circuiting, or other electrical failure (i.e. bearing failure) and correct.
	Field disposal system turned off or blocked	Check the piping and lateral field piping visually or with drain cleaning equipment for an obstruction and correct.

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
	The power cable to the pump has been damaged or is not connected properly.	Have a certified electrician check the wiring to the pump.
	The original cause for alarm has been corrected, but the flashing circuit for the indicator light has not been reset by technician.	Reset < on PLC.
The audible alarm is on.	An alarm condition has occurred. See troubleshooting items under flashing alarm indicator.	Push mute button to silence alarm.
Pump or pumps are making a loud whining or grinding noise.	A foreign object has entered pump housing.	Remove pump for service and check condition of inlet.
The PLC is flooded.	Water has entered the PLC cabinet.	The PLC should be located in an area where water does not accumulate.
Wastewater is backing up into the home sewer piping	There is an obstruction in the home sewer piping.	Check the piping lead to the system for an obstruction visually or with drain cleaning equipment for an obstruction and correct.
	There is an obstruction in the discharge line from the system.	Check the effluent piping and lateral field piping visually or with drain cleaning equipment for an obstruction and correct.
	The lateral field pump had failed	Check the operation of the lateral field pump as per the pump manufacturer's specifications.
	The flow rate to the system is too high.	Check the maximum flow rate to the system to see that it is within normal limits.
	The tank requires cleaning and/or a pump out is required.	Check the sludge depth in both chambers of the tank to see if it is below required levels. If the depth is too great, arrange to have the tank pumped out and, if necessary, cleaned.
There is an unpleasant odour emanating from the unit.	The recirculation pump and air vents are not operating correctly.	Check the pump, vents and piping for proper operation.
	The system is overloaded.	Check the maximum flow rate to the unit to see that it is within normal limits.
		Check the quality and contents of the flow into the unit for any abnormal or prohibited substances.

SECTION 8

TEXASS
COMMISSIONING AND SERVICING PROCEDURE

Prior to arriving on site to service or commission a newly installed System, check that the electrician has completed the wiring in accordance with the wiring diagram supplied, and power is connected to the house.

Confirm with owner that sufficient water is available in the Tank to allow proper operation.

1. Remove all lids to allow access to all chambers.
2. Check PLC and all electrical connections are OK
3. Check spray nozzle for operation and spray pattern.
4. Check foam height, approximately 100mm to 200mm below nozzle operational settling is normal top up if required.
5. Check operation of sequential valve and irrigation solenoid valve
6. All valves and flows are factory pre-set. For these details please contact Oasis Clearwater.
7. Test the high water alarm floats, one in recirculation chamber and one in irrigation chamber, by manually lifting the float, and check that the audio-visual alarm installed in the house is working (if fitted).
8. If insufficient water in the irrigation or recirculation chamber, lift pump float to confirm working.
9. Double check the audio-visual alarm and make sure the Mute button is in the ON position.
10. Irrigation field needs to be inspected for even effluent distribution over the disposal area.

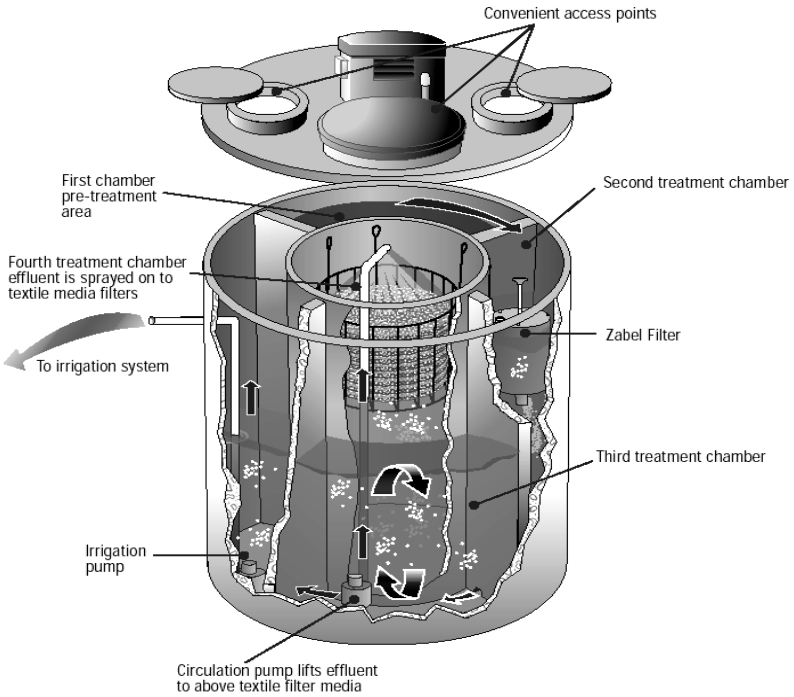
TEXASS SERVICING PROCEDURE

Ensure correct NAME & ADDRESS is on Service Report.

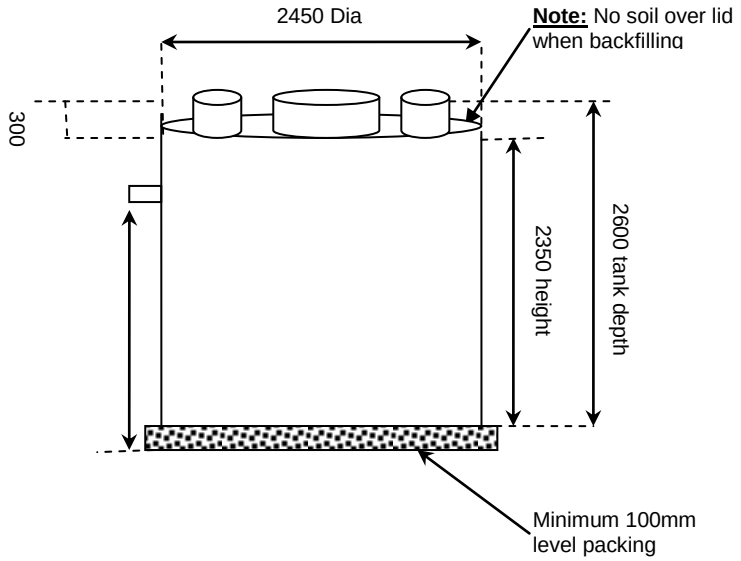
1. Identify yourself to home owner.
2. Remove shoes, enter house and check control panel lights and switches.
3. Visually inspect the treatment plant including landscaping lines and drippers.
4. Remove all turret lids.
5. Turn field isolator to “OFF” position when servicing inside PLC cabinet.
6. Check primary sludge depth, if over 2/3 tank depth advise customer to have it pumped out.
7. Remove and clean filter as necessary (Arkal and Zabel).
8. Check operation of all floats, sequential valve and irrigation solenoid valve.
9. Check spray nozzle for operation and spray pattern clean, if necessary.
10. Check foam height approximately 100mm to 200mm below nozzle operational settling is normal top up if required
11. Check Dissolved Oxygen (DO) with DO probe 2-7 mg/L.
12. Collect a sample from inside the pump well and carry out tests for:
    a) Clarity (average 70 – 100% reading)
    b) Residual Chlorine (average .2 p.p. million)
    c) pH 7.0 – 8.0 reading
13. Replace all covers accurately and make sure the field isolator is switched **ON** (**IMPORTANT**).
14. Fill in Service Report Sheet accurately
    Leave ONE copy with home owner
    One Copy to be sent to relevant Council
    One copy to OASIS CLEARWATER
    Retain one copy

SECTION 9

TEXASS EXCAVATION DETAILS



Unit weight 7.5 tonnes
Hole 3000 square – approx. 2600 deep



FILL WITH WATER TO PREVENT FLOTATION

SECTION 10

ELECTRICAL REQUIREMENTS AND WIRING DIAGRAM
Electrical Specifications

The electrical equipment within the TEXASS Unit consists of one 600 watt discharge pump, a 400 watt recirculation pump and an electrical distribution PLC (programmable logic controller), all installed on the TEXASS Unit.

Electrical Requirements to be provided by Owner's Electrician:

A 230Volt AC 2.5mm TPS dedicated supply must be provided from the mains-board supply to the Oasis TEXASS Unit.

Also a two core 1.5mm TPS cable is to be connected between the terminals in the PLC and the alarm unit (as supplied). Alarm unit should be mounted in a convenient inside location eg: garage or shed.
All alarm fault messages will appear on the PLC screen. The alarm unit operates on 24V DC.

Power supply and cable should be sized to avoid any voltage drop. A higher than normal liquid level will sound the alarm, and activate the red lamp. This can be muted until normal operation is restored, by placing the alarm in the mute position.

Two high level alarms are programmed in to the PLC; a malfunction of either the MBR or the irrigation pump will trigger an alarm. A malfunction in any circuit breakers should not be reset until the reason for the trip out is established and any malfunction is rectified.

All alarms and motor connections are hard wired into the PLC. The only wiring required is the supply cable, clearly labelled in the PLC. NO RCD unit is required.

The 3 pin socket in the PLC box is 230V AC and is for servicing or to run a UV sterilization unit.

All sequential timing and pump run times are pre programmed into the PLC and are code locked to avoid tampering. Any programme changes should only be done in conjunction with Oasis Clearwater Environmental Systems.