



Certificate of Accreditation

On-Site Waste Water Management System

This Certificate of Accreditation is hereby issued by the Minister for Building and Construction pursuant to Section 59(2) of the *Building Act 2016* and the Plumbing Code of Australia as applicable.

System: Ozzi Kleen RPI0A+ AWTS

Manufacturer or Supplier: Neatport Pty Ltd, T/A Suncoast Waste Water Management

Of: 59, Industrial Avenue, Kunda Park, QLD, 4556

This is to certify that the Ozzi Kleen (RPI0A+) as described in Schedule 1, has been accredited for use as an on-site waste water management system in single dwellings (within plumbing installations in Tasmania). This accreditation is subject to the conditions and permitted uses specified in Schedule 2, and the Plumbing Code of Australia as applicable.

Dale Webster
Director of Building Control
Delegate of the Minister for Building and Construction

Date of Issue: 8/5/2017

Certificate Number: DOC/17/25799

This Certificate of Accreditation is valid until 8/5/2022 subject to conditions unless withdrawn earlier by the Director

Schedule I: Specification (Informative)

PROCESS

The Ozzi Kleen sewage treatment units work with a cyclic aeration process built into a single tank designed to accept and treat the sewage. The waste products in the sewage are completely consumed by naturally occurring bacteria in the oxygen-rich environment in the aeration tank. The system treats the organic waste to produce treated water of a high standard. The unit consists of a round polyethylene tank with an internal effluent compartment and pumping system.

The sewage is treated in a “Bioreactor” which is a suspended growth activated sludge process using Cyclic Extended Aeration process with intermittent decanting. It is treated in a series of batch phases within the Bioreactor to achieve the desired effluent quality.

The treatment operation in the bioreactor is automatically controlled by the PLC system in a pre-determined cycle. The treatment can be operated at different cycle times to enable operational flexibility. For normal operation, the operation consists of the following cycles:

Feed and Aeration Cycle

Incoming sewage flows into the bioreactor and is mixed with the biomass held in the aeration tanks. This is aerated and oxygenated by diffused air supplied from an air blower. Aeration is provided to meet the process oxygen demand for carbonaceous oxidation, nitrification and for mixing. As aeration takes place and continues, an ideal aerobic environment for micro-organisms and a humus type activated sludge is formed. With this balanced aeration and a good healthy activated sludge, digestion and oxidation of the organic waste occurs. A balance of aeration in relation to the organic/hydraulic load is maintained for a good steady reliable treatment process. BOD oxidation and nitrification also occurs during this phase of operation.

Settling Cycle

Immediately after the aeration cycle, a settling condition is created to provide solids- liquid separation, which allows a quiet period where the biomass has time to settle. As the biomass is settling it acts as a filter blanket trapping all the waste that is in suspension in the mixed liquor of the aerobic biomass and settles it to the floor. This provides for further carbonaceous oxidation (anoxically), clarification, and denitrification. A zone of clear water is generated at the surface of the aeration tank, which is now acting as a clarifier.

Decant Cycle

After a predetermined settling period a decanting cycle takes place. The floating decanter draws off water from just under the surface to a predetermined level. During the decanting cycle the anoxic treatment process continues carbonaceous oxidation, clarification, and denitrification, and automatically decants highly treated clarified effluent which flows into the chlorinator for disinfection by gravity. The decanting cycle continues drawing off effluent until the electronic process control puts the system back into the aeration cycle.

At the end of the decanting cycle which is the start of the next aeration cycle the blower on timer starts the blower again causing air pressure to purge the liquid from the decanter and an air-lock is created in the decanter’s bladder, thus stopping any flow of water and the decanting procedure. Variable duration for each cycle can be chosen for optimum treatment.

Automatic Sludge Wasting and Storage

Waste sludge is pumped from the bioreactor at the beginning of each aeration cycle by the PLC controlled sludge pumps into a 350 litre sludge holding tube. The sludge that is wasted from the aeration tanks moves on to digestion in the sludge tube. As sludge is settling and thickening a separation of water and sludge occurs. The concentrated solids (waste sludge) are eventually pumped out for disposal, and the supernatant from the sludge tube flows into the main aeration tank for further treatment.

The sludge wasting programme will not need to be activated until there is sufficient biomass which would be determined at the time of each service.

Basket Strainer

The decanted effluent from the aeration tank will flow through a sock strainer to remove the scum from the decanted effluent.

Chlorination

The treated effluent from the RPI0A+ will be disinfected through the chlorinator and an effluent chlorine contact tank. Although the effluent is treated, it contains many types of human enteric organisms that are associated with various waterborne diseases. Disinfection can selectively destruct the disease-causing organisms in the sewage effluent. The chlorinator and the chlorine contact tank are designed to meet the disinfection requirements.

A disinfection process of effluent is carried out using chlorination equipment to treat the final water before discharge. The chlorinator uses tablet chlorine (TICA Trichloroisocyanuric Acid) and is self-compensating for variations in flow. The bottom tablet is submerged at all times and during periods of low flow this ensures sufficient chlorine is released, and during periods of high flow the water level in the chlorinator increases and more tablets are exposed as these are dissolved, more chlorine is released in sufficient quantities to ensure disinfection. A dose rate residual chlorine is maintained in the effluent of between 0.5-to 2.0 mg/l free chlorine prior to being delivered to the effluent storage or disposal area.

Effluent Pump and Controls

The effluent storage compartment of the unit holds approximately 300 litres of water which gives sufficient storage. The effluent storage compartment has a submersible pump controlled by a float switch that is part of the submersible pump.

Chemical Phosphorus Removal

A chemical (Alum) dosing system is provided in the motor box of the RPI0A+. The dosing of Alum at a controlled rate is for phosphorus removal from the activated sludge. Phosphorus removal takes place within the mixed liquor of the aeration tank with the addition of the flocculating chemical, which precipitates and binds the element to the sludge and is removed from the treatment cycle through the exercise of sludge wasting.

Effluent Discharge

When the liquid has reached the predetermined level in the chlorine contact tank, the effluent pump will operate and pump out the effluent to the irrigation or disposal system.

The effluent pump is controlled by a float switch which is hardwired to the pump. This is held on the side of the pump handle in a special groove designed to hold the float's cable. If the float cable is removed from the groove and left to hang without any support, the float will not turn the pump off due to the float cable being longer than the length of the pump body causing the pump to constantly run dry causing premature failure of the pump. If it is noted that the float has become dislodged from its groove, the pump will need to be removed and the float cable returned to the groove. When installing the cable, ensure that the head of the float hangs vertically before it reaches the bottom of the pump housing to ensure that the pump will turn off before the effluent reaches the bottom of the pump.

Schedule 2: Conditions of Accreditation

1.0 Definitions

In this schedule:

AS/NZS 1547 means the Joint Australian/New Zealand Standard ‘AS/NZS 1547:2000 On-site domestic-wastewater management’;

AS/NZS 1546.3 means the Joint Australian/New Zealand Standard ‘AS/NZS 1546.3:2001 On-site domestic wastewater treatment units, Part 3: Aerated wastewater treatment systems’;

AS/NZS 3000 means the Joint Australian/New Zealand Standard ‘AS/NZS 3000:2000 Wiring rules’

AS/NZS 5667 means the Joint Australian/New Zealand Standard ‘AS/NZS 5667.1:1998 Water quality – Sampling, Part 1: Guidance on the design of sampling programs, sampling techniques and preservation and handling of samples’;

BOD₅ means ‘5-day Biochemical Oxygen Demand’;

Council means ‘the Municipal Council having jurisdiction’;

Commissioned means ‘when the test results from a NATA Certified Laboratory show that the water quality requirements for the AWTS have been met and all pre-commissioning tests have been carried out in accordance with AS/NZS 1547 on all associated equipment and the sub-surface irrigation system’;

Designer means ‘a person who has a specialty in the area of designing on-site waste water management system installations and may include but not be restricted to appropriately trained professional engineers, soil scientists, land surveyors and plumbers’;

Director means ‘the Director of Building Control’;

EC means electrical conductivity

E. coli means ‘Escherichia coli of the family Enterobacteriaceae which is a bacterium used in public health as an indicator of faecal pollution’;

g/m³ means grams per cubic metre

Manufacturer means ‘Neatport Pty Ltd, T/A Suncoast Waste Water Management’;

N means ‘Nitrogen’;

NATA means ‘National Association of Testing Authorities’;

PCA means ‘Plumbing Code of Australia 2004’;

Permit means ‘a Permit issued by the council pursuant to section 82 of the Building Act 2000’;

Permit authority means ‘a person or body authorised for that purpose by the council of the municipal area in which the on-site waste water management system is installed’;

Supplier means ‘the party that is responsible for ensuring that products meet and, if applicable, continue to meet, the requirements on which the certification is based.’ The supplier for the **Ozzi Kleen RPI0A+ is Suncoast Waste Water Management**”

System means ‘Ozzi Kleen RPI0A+’

TSS means ‘Total Suspended Solid

2.0 General

- 2.1 This Certificate of Accreditation is valid up until the date nominated on the front page of this accreditation. Any application for variation or renewal must be accompanied by Product Certification to AS/NZS 1546.3 that has been issued by a JAS-ANZ accredited Conformity Assessment Body (CAB) and other required documentation in accordance with the latest Application for Accreditation Form. The Certificate of Accreditation may be withdrawn by the Director at any time and is not transferable.
- 2.2 This certificate supersedes all previously issued certificates.
- 2.3 The system must be supplied, constructed and installed in accordance with the design submitted and accredited by the Director.
- 2.4 The system must not be installed or used in a plumbing installation other than in accordance with the conditions of permit issued by the Permit Authority.
- 2.5 Each system must be permanently and legibly marked on a non-corrosive metal plaque or equivalent, attached to the lid with the following information:
- The brand and model name or designation of the system;
 - The manufacturer's name or registered trademark;
 - Top load limitations; and
 - The month and year of manufacture.
- 2.6 The supplier must supply the owner and occupier, of each installation, with a user manual setting out the following:
- (a) the treatment process;
 - (b) procedures to be followed in the event of a system failure;
 - (c) emergency contact number;
 - (d) care, operation, monitoring and maintenance requirements; and
 - (e) inspection and sampling procedures to be followed as part of the on-going monitoring and program required by the permit authority.
- 2.7 Any proposed modifications to the system's specified processes, equipment, materials, fittings or manuals must have prior authorisation in writing from the Director and may be subject to additional verification or testing.
- 2.8 Each application to a permit authority to install a system must be accompanied by a site-and-soil evaluation report and design report in accordance with AS/NZS 1547 as appropriate.
- 2.9 The supplier must provide the following information to each permit authority where it is intended to install a system in their jurisdiction:
- Statement of warranty
 - Statement of service life
 - Quality Assurance Certification
 - Installation Manual
 - Service Manual
 - Owner's Manual
 - Service Report Form
 - Engineering Drawings on A3 format
 - Detailed Specifications
 - Copy of Certificate of Accreditation and Schedules.
- 2.10 At each anniversary of the accreditation date the supplier must submit to the Director a list of all systems installed in Tasmania during the previous 12 months. The Director may randomly select up to 10% of the installed systems from each year of installation. The Director will notify the supplier's nominated NATA accredited laboratory which systems are to be sampled and tested for BOD₅ and TSS and Chlorine residual. The sampling and testing of the selected systems is to be done at the supplier's expense. The following results must be reported to the Director:

- Address of premises;
 - Date inspected and sampled;
 - Sample identification number;
 - Chlorine Residual;
 - BOD_5 ;
 - TSS;
 - *E. coli* and
 - Service history
- 2.11 Where, due to a design fault, the system has been found not to operate satisfactorily during its service life and as a result requires modification to achieve the required water quality limits, all installed systems are to be modified accordingly.
- 2.12 When granting a *permit* the *permit authority* is to satisfy itself that the *designer's* choice of the system configuration is optimal for the proposed use and site conditions.
- 2.13 The system must not be deployed to areas where seasonal climatic conditions will negatively affect its proper operation (refer to *manufacturer's* specifications).
- 2.14 Prior to the granting of a *permit* to install the system the following reports (see AS/NZS 1547 Clause 7.4) must be submitted with an application to the *permit authority*:

Site-and-soil evaluation report

The site and soil evaluation report is to detail results of an assessment of the individual lot(s) for the public health, environmental, legal and economic factors which are likely to impinge on the location and design of a land-application system. (Refer to AS/NZS 1547 Clause 5.2.4 and Appendices B, C, D, E & G)

Design report

The Design Report is to include the following:

- (a) Relevant aspects of the Site-and-soil Evaluation Report.
 - (b) A report on the selection of the land-application system. (Refer to AS/NZS 1547, Clause 5.5.7).
 - (c) A report on the selection of the wastewater-treatment unit. (Refer to AS/NZS 1547, Clause 5.5.4 Appendix H and J).
 - (d) Sufficient information to show that the relevant performance requirements set out in the PCA have been met.
 - (e) A loading certificate which sets out the design criteria and the limitations associated with use of the system and incorporates such matters as:
 - (i) System capacity (number of persons (EP) and daily flow);
 - (ii) Summary of design criteria;
 - (iii) The location of and use of reserve areas;
 - (iv) Use of water efficient fittings, fixtures, or appliances;
 - (v) Allowable variation from design flows (peak loading events);
 - (vi) Consequences of changes in loading (due to varying wastewater characteristics);
 - (vii) Consequences of overloading the system;
 - (viii) Consequences of under loading the system;
 - (ix) Consequences of lack of operation, maintenance and monitoring attention; and
 - (x) Any other relevant considerations related to the use of the system.
- 2.15 The following reports must be submitted to the *permit authority* and owner and be made available to the *Director* upon request after *commissioning* of the system:

Installation and commissioning report

The Installation and Commissioning Report is to cover the 'as-constructed' records of the system installation together with the results of *commissioning* tests to demonstrate correct construction and installation and is to be provided to the owner and *permit authority* on completion of the work. (Refer to and AS/NZS 1547 Clause 6.2.5.4).

Inspection and Maintenance Report

Maintenance reports cover ongoing inspection and maintenance operations in order to monitor the operation of the installation. (Refer to AS/NZS 1547 Clause 6.3.5 Appendix T & U).

- 2.16 Where the supplied pump is not suitably rated for the proposed land application area it must be replaced with a pump which has a rated capacity that matches the hydraulic characteristics of the irrigation system and be capable of discharging at least 50% more than the 30 minute flow rate. For drip irrigation systems, ensure that drip emitter flow rates do not vary more than 10% from the design rate over the whole of the system when installed on a sloping site.

Note: The pump selection is to be based on flow, head loss and pressure requirements.

- 2.17 Effluent distribution by sub-surface application may be permitted where the *Permit Authority* is satisfied that the application for a *permit* to install the *system* has demonstrated that the:
- effluent can be retained within the authorised land application area;
 - where applicable the land application system has been designed and is capable of being installed and maintained in accordance with AS/NZS 1547;
 - the location of the land application system satisfies the relevant requirements of the *State Policy on Water Quality Management 1997*; and
 - the discharge is capable of satisfying the relevant water quality limits (see 5.2).

3.0 Installation and Commissioning

- 3.1 The installation and operation of the *system* must comply with the conditions of accreditation and the *manufacturer's* instructions.
- 3.2 All plumbing work carried out in connection with the *system* installation must satisfy the requirements of the *Building Act 2000* and the Tasmanian Plumbing Regulations and be carried out by a registered plumber with appropriate training and qualifications.
- 3.3 All electrical work must be carried out by a licensed electrician and in accordance with relevant provisions of AS/NZS 3000.
- 3.4 The *system* requires a 240V AC power supply. A weather-proof isolating switch must be provided at the power outlet. The power supply must have its own clearly marked designated circuit breaker in the electricity supply fuse box.
- 3.5 Each *system* installation must be inspected and checked by the *designer* or the *designer's* agent. The *designer* on completion is to certify that the system has been constructed, installed and *commissioned* in accordance with its design, the conditions of accreditation and any additional requirements set out in the *permit*.

Note: Where the *designer* is not available to supervise the installation the *designer* should obtain signed certification from the installing plumber stating that the installation has been constructed/installed and *commissioned* in accordance with its design, the conditions of accreditation and any additional requirements of the *council* and/or *permit authority*.

- 3.6 Where discharging wastewater to a land application system by irrigation, the sampling procedure for auditing or random sampling purposes must be in accordance with the sampling procedure for OzziKleen sewerage systems document in Appendix A of this Accreditation.
- 3.7 A report is to be prepared by the *council* approved plumbing contractor detailing the inspection of the installation and the results of the *commissioning* tests and be accompanied by a certificate certifying that the system is operating and performing adequately (see 2.15).
- 3.8 Copies of the following reports/certificates must be submitted to the *council* and the owner as soon as practicable after the commissioning of the *system* and after each scheduled or unscheduled service or inspection for the period specified in the *permit*:
- The initial plant installation and commissioning report;

- (b) All required laboratory analytical test reports; and
 - (c) All inspection and maintenance reports
- 3.9 Copies of any report or certificate required by the conditions of this accreditation must be made available to the *Director* on request.
- 3.10 The *designer* is to provide a statement warning the user of which items and products that must not be placed in the *system*.
- 3.11 To verify that the plant is commissioned, sampling must be carried out, by a *council* approved person, for *BOD₅*, *TSS* and Free Residual Chlorine. The samples are to be tested and reported on by a NATA certified laboratory.

4.0 Maintenance and monitoring

- 4.1 Each installation must be serviced and monitored at not less than 3 monthly intervals in accordance with the conditions of accreditation, the conditions of *permit* and *manufacturer's* requirements.

Notes:

- (1) Only a licensed plumber and or his or her qualified technician can carry out the maintenance and required monitoring of the *system* other than electrical work unless licensed to do so.
 - (2) The licensed plumber and his or her technician may need to complete training by the *supplier* before carrying out any maintenance on the *system*. The licensed plumber and their technician must comply with the applicable Directors Determination with regard to the training and qualifications required to carry out servicing on the AWTS.
 - (3) The maintenance and monitoring intervals may be combined provided the monitoring frequency remains at 3 month intervals.
- 4.2 The owner of the *system* must enter into and maintain a maintenance contract with a suitably licensed plumbing contractor.
- 4.3 The owner must notify the *council* that a maintenance contract is in place for the maintenance of the AWTS.
- 4.4 The *system* must be operated and maintained to ensure it performs continuously and without any intervention between inspections carried out by the *council* approved plumbing contractor.
- 4.5 A service report is to be prepared by the plumbing contractor who carried out the work detailing the inspection of the installation and the results of all servicing tests and conditions at the completion of all scheduled or unscheduled services or inspections.
- 4.6 The service report is to be accompanied by a signed document certifying that the *system* is operating and performing adequately.
- 4.7 A copy of the service report and certifying document is to be provided to the occupant and *council*. Each service report is to contain a statement reminding the user of which items and products that must not be placed in the *system*.
- 4.8 Each service must include monitoring the operation of the *system* and associated land application system.
- 4.9 Maintenance must be carried out on all mechanical, electrical and functioning components of the *system* as appropriate.
- 4.10 The monitoring, servicing and reporting of the installation must include but not be restricted to the following matters, as appropriate:
- (a) Reporting on weather conditions, ambient temperature, effluent temperature;
 - (b) Odour;
 - (c) Check and test pump
 - (d) Check and test air blower, fan or air venturi and clean/replace air filters;
 - (e) Check and test alarm system;
 - (f) Check and report operation of sludge return, sludge level and de-sludging;
 - (g) Check and record water meter reading (if fitted);
 - (h) Check and record operation of irrigation area, irrigation fittings;
 - (i) Check and clean/replace irrigation filters;

- (j) Check and report on water quality (testing for pH, Turbidity, EC and dissolved oxygen);
- (k) Check, and replenish chlorine disinfection system;
- (l) Cleaning of the following items at above the waterline–
 - I. clarifier,
 - II. pipework,
 - III. valves
 - IV. walls of chambers

5.0 Performance

5.1 Hydraulic and Organic Loading:

The system is accredited for treatment of domestic wastewater from a single dwelling with the following MAXIMUM hydraulic and organic loads:

Maximum Hydraulic and Organic Loading		
Model	Max Hydraulic load (L/day)	Organic Loading (g/day)
RPI0A+	2000	BOD (700 g) TSS (700 g) Nitrogen (150 g) Phosphorus (25 g)

5.2 Water Quality Limits:

Treated effluent from the system must not exceed the following limits for the uses specified in section 7.0, or those specified by the Permit Authority (whichever are the more stringent).

Water Quality Limits	
For sub-surface irrigation:	
5-day Biochemical Oxygen Demand (BOD5)	Ninety per cent of the samples must have a BOD5 of less than or equal to 20 g/m3 with no sample greater than 30 g/m3
Total Suspended Solids (TSS)	Ninety per cent of the samples must have a TSS of less than or equal to 30 g/m3 with no sample greater than 45 g/m3
For surface irrigation:	
5-day Biochemical Oxygen Demand (BOD5)	Ninety per cent of the samples must have a BOD5 of less than or equal to 20 g/m3 with no sample greater than 30 g/m3
Total Suspended Solids (TSS)	Ninety per cent of the samples must have a TSS of less than or equal to 30 g/m3 with no sample greater than 45 g/m3
<i>E. coli</i>	The average <i>E. coli</i> concentration must be 10 cfu per 100 mL with no more than 20% of samples exceeding 20 cfu per 100 mL

Free Available Chlorine concentration(FAC)	The FAC concentration must be between 0.5 – 2 g/m ³ at the maximum flow rate for the wastewater treatment unit
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6.0 On-going management

- 6.1 The mandatory servicing and monitoring is to commence 3 months after the system is commissioned. The servicing and monitoring is to coincide with the supplier's required on-going routine scheduled maintenance program.
- 6.2 Where a system installed at a site has been found not to operate satisfactorily during its service life, and as a result requires modification to achieve the required performance requirements, in particular, water quality limits, the installed system is to be modified accordingly. Any modifications must be recorded on the service report.
- 6.3 In the event of failure to comply with the water quality limits set out in these conditions, fortnightly sampling and testing for BOD₅, TSS and Free Available Chlorine must be carried out until the plant is re-commissioned.
- 6.4 The method of preserving and the handling of samples taken from the plant must satisfy the relevant requirements of AS/NZS 5667.
- 6.5 Copies of the following reports and certificates must be submitted to the permit authority and the owner as soon as practicable after the commissioning of the system and after each scheduled or unscheduled service for the period specified in the permit:
 - (a) the initial plant installation and commissioning report
 - (b) all laboratory analytical test reports; and
 - (c) all inspection and maintenance/service reports
- 6.6 The system is to be de-sludged every five years OR in accordance with the manufacturer's recommendations and the sludge is to be disposed of in accordance with the Tasmanian Biosolids Reuse Guidelines and the conditions of permit.
- 6.7 Only persons with a waste transport business Environment Protection Notice are to be engaged for the removal, transporting and disposal of accumulated sludge removed from the system.
- 6.8 Any waste material removed from the system must be collected and disposed of or utilised by an approved facility or agency.
- 6.9 Measures are to be put in place so that during servicing activities all persons and the environment will be protected from the results of the servicing activities.

7.0 Permitted uses

- 7.1 The effluent is suitable for land application by any of the following methods:
 - (a) sub-surface by:
 - (i) shallow subsurface drip irrigation;
 - (ii) trenches, beds, mounds, evapo-transpiration, LPED systems
 - above ground by:
 - (i) spray irrigation; or
 - (ii) covered surface drip irrigation

Note: Each of the above forms of Land Application is subject to consent from the permit authority and must be in accordance with the relevant provisions of AS/NZS 1547.

- 7.2 Where it is not practicable for effluent from the system to be applied in accordance with AS/NZS 1547, the method of discharge must satisfy contemporary relevant regulatory requirements to the satisfaction of the permit authority.

Specifications

Parameter	Raw Wastewater Characteristics
Wastewater treatment	10 persons EP at 200 L/person/day
Maximum hydraulic load	2,000 L/day
Biological Oxygen Demand	350 mg/L or 70 g/day/person
Total Suspended Solids (TSS)	350 mg/L or 70 g/day/person
Fats, Oils and Grease (FOG)	75 mg/L. For restaurant applications, a grease trap must be fitted upstream of the treatment plant to remove grease and oils.
pH	6 < pH < 10
Wastewater temperature	10°C to 38°C

Treatment Plant Construction:

Tank and components All Pipe work	Polyethylene (MDPE) PVC
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Electrical Equipment:

Air Blower	AP80HN
Effluent Pump Submersible	Reefe 300 Pump, 400W.
Controls	Electronic (OKI Control Board) Alarm
System:	
Alarm System	24VDC Audio/Visual
Alarm signal	Indicator for High Water, Power & Blower

Aeration Tank:

Operating Volume	4.1 m ³
Aeration tank volume	5.3 m ³
Residence time	46 hr
Buffer Zone	1 m ³ (approx.)

Disinfection equipment:

Chlorinator Type	Tablet Dispenser
min contact time (max flow)	Cassette Chlorine 30 min

Motor Box:

Equipment Contained	Air Blower, Control Board, Decanter, Solenoid Valve equipment
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Effluent Pump (standard):

Effluent pump duty	100 litres/min @ 8 m head
Pump Mounting	Suspended on discharge pipe

Optional Equipment

Sock Filtration Equipment:

Flow rate	250 litre/min Max
Pressure	250 kPa Max

Nutrient Reduction Equipment:

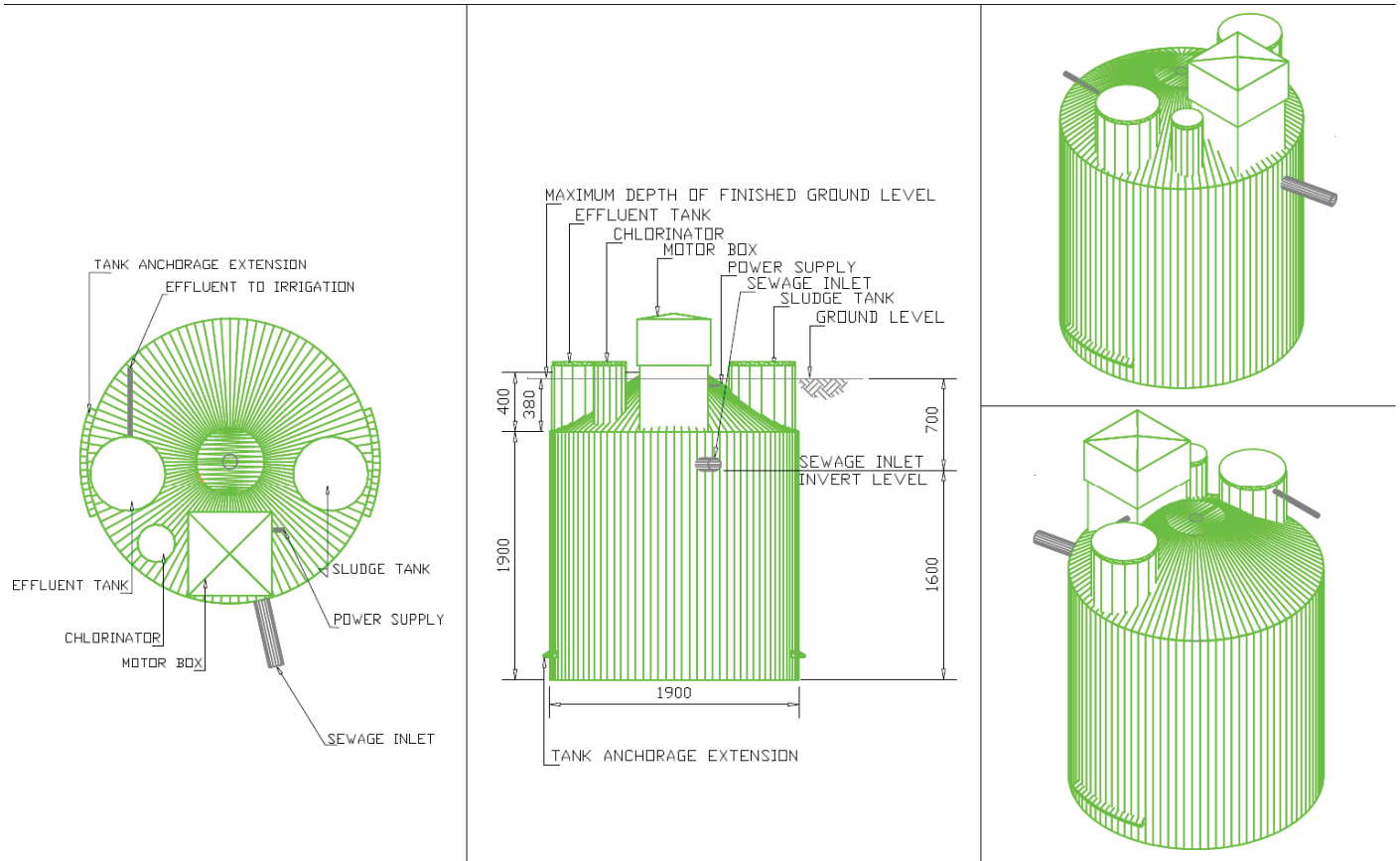
Process control Electronic
Phosphate reduction process Chemical dosing / Sludge wasting

Sock Filters 120/210/Other Microns

Lifting/Pump Stations SLS250, PT500, other sizes available

Other Customization available Please enquire

Irrigation Equipment: Basic irrigation equipment is supplied with the treatment plant. The irrigation system could be of several different formats. Check with Local Authority requirements.



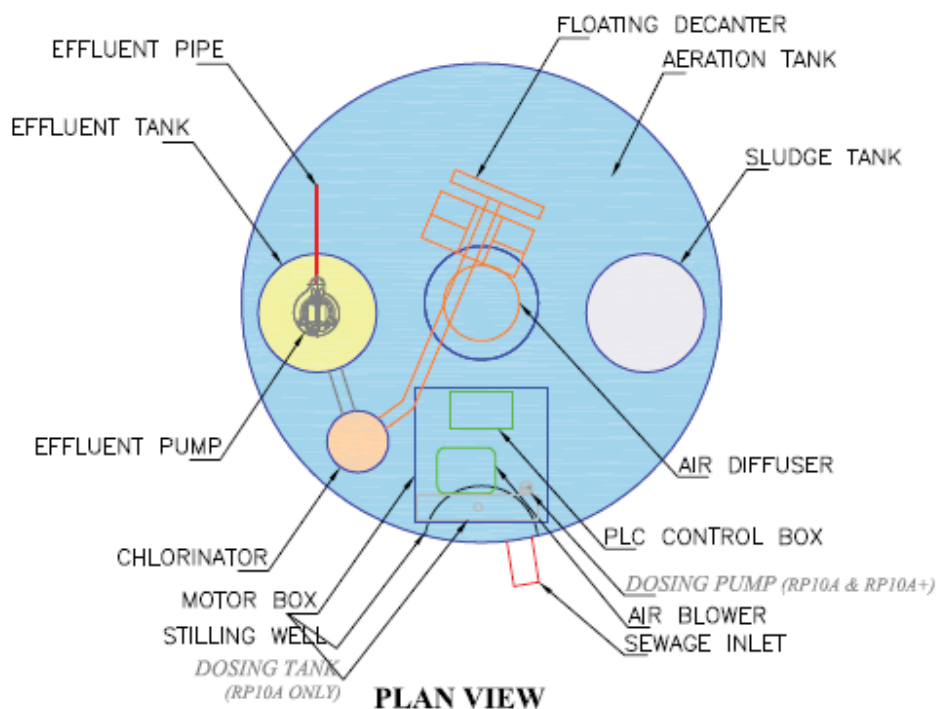
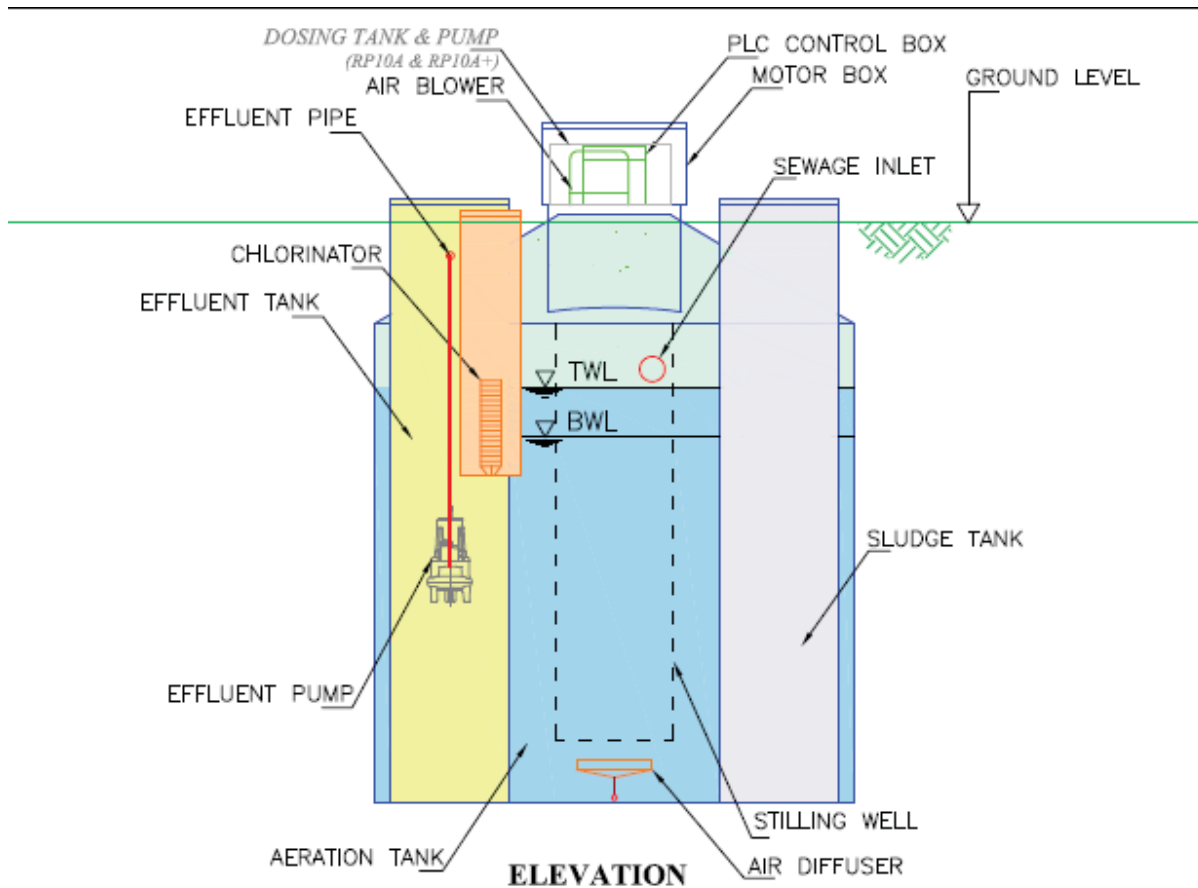
26/06/08	GENERAL REVISION	1	DC
DATE	DESCRIPTION	REV.	BY



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CLIENT	GENERAL	DESIGN	DC
PROJECT	OZZI KLEEN AWTS RP10	DRAWN	DC
TITLE	SYSTEM DETAILS	CHKD	MC
DWG NO.	GD-RP10-H10.A	DATE	26/06/08
		SCALE	NTS



20/12/16	RP10A+ Notation	3	ARP	<p>55 INDUSTRIAL AVE KUNEA PARK QLD 4556 PH +61 7 5455 4900 FAX +61 7 5455 4677 www.ozziclean.com</p>	CLIENT	GENERAL	DESIGN	AP
02/09/13	AIR DIFFUSER LOCATION UPDATED	2	SB		PROJECT	Ozzi Kleen RP10 PACKAGE STP	DRAWN	SB
28/08/08	GENERAL REVISION	1	DC		TITLE	SYSTEM DIAGRAM	DATE	02/08/13
DATE	DESCRIPTION	REV.	BY		DWG NO.	GD-RP10-H10.B	SCALE	NTS
Suncoast Waste Water Management								

Appendix A

Sampling Procedure for Models RPI0, RPI0A and RPI0A+ AWTS.

EQUIPMENT NEEDED

Ozzi Kleen service technician is required to provide equipment as required to facilitate sampling including:

1. Sub surface sampler. Approx. 1.8m long with a sample taking or bottle holding device on the end. Commercial examples – Tank Sampler (Thermo Fischer), Series 6000 Jar Sampler (Ben Meadows), Grab Sampler Li (Rickly Hydrogeologic),
2. Hex drive bit and battery drill, or socket set and driver.

Sampler / Auditor is to provide:

1. Sterilised esky to transport the samples to the laboratory within 24hrs at a temp of less than 4 Degrees Celsius.
2. Approved Sampling bottles

PROCEDURE

Please note that steps 1-6 below will be performed by an Ozzi Kleen service technician upon request by the relevant Authority conducting the sampling / auditing. The service technician is also responsible for securing all plant and equipment upon completion of the sampling / auditing.

1. Ozzi Kleen accredited service technician unscrews and opens the motor box and effluent chamber, ensuring that there is nothing mechanically wrong with the system.
2. Turn the power to the system off at the GPO.
3. Prepare the sampler or sample bottle on the sampling stick.
4. Mark the sample pole at 1450mm from the sample inlet. Lower the sampler until the mark is level with the lip of the effluent chamber. This will ensure the sample is taken at the same level as the inlet to the irrigation pump.
5. Allow sampler or sample bottle to fill completely before raising from the sampling height.
6. Promptly fill, and or, seal the sample. Making sure not to contaminate the sample.

The Sampler / Auditor is responsible for the following steps:

7. Label accordingly and place sample in sterilised esky at 4 degrees Celsius or lower.
8. Deliver to laboratory, complete with relevant Chain of Custody forms.
9. If further samples are required or you are sampling another plant, please sterilise equipment and repeat procedure.

NOTE:- If the influent or effluent looks to be outside of manufacturer's specifications, take a sample from the stilling well also.