



Health

Certificate of Accreditation

Sewage Management Facility

Aerated Wastewater Treatment System

This Certificate of Accreditation is issued by the Secretary of the NSW Ministry of Health pursuant to Clause 41(1) of the Local Government (General) Regulation 2005.

System: Ozzi Kleen RP10 A+ (Nutrient Reduction) AWTs

Manufacturer: Suncoast Waste Water Management

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

The Ozzi Kleen RP10A+ AWTs as described in Schedule 1, has been accredited as a sewage management facility for use in a single domestic premises in NSW. This accreditation is subject to the conditions of accreditation and permitted uses specified in Schedule 2.

*Director, Environmental Health
for Secretary (delegation PH335)*

Issued: 16 January 2017

Certificate No: AWT5014

Expires: 31 December 2020

Schedule 1: Specification

Ozzi Kleen RP10A+ Aerated Wastewater Treatment System

The Ozzi Kleen RP10A+ Aerated Wastewater Treatment System (AWTS) with nutrient reduction is designed to treat the wastewater from a residential dwelling occupied by a maximum of 10 persons. The Ozzi Kleen RP10A+ AWTS is contained in a vertically aligned cylindrical roto moulded polyethylene collection well with a design capacity of 4150 litres. The operational water level in the system is 1600 mm. The system consists of:

- a stilling well within the aeration/sedimentation chamber that prevents the incoming wastewater from disturbing the still water conditions required for settling and decanting;
- An aerated/sedimentation chamber with a capacity of 4150 litres where the treatment of the wastewater occurs through a programmable cycle of three intermittent phases.
 - An aeration phase when an aerobic environment is provided for micro-organisms. These conditions enable the micro-organisms to feed and grow on the organic waste and establish an "activated sludge".
 - A settling phase when still conditions allow for settlement of the activated sludge to the bottom of the tank, leaving a layer of clear water at the top.
 - A decanting phase when still conditions are maintained but clear, treated water is drawn from near the surface of the tank for delivery to the chlorinator, basket strainer and chlorine contact tank.
- A combined 350 L chlorine contact chamber/irrigation pump chamber with a capacity of 300 litres for chlorine contact of the effluent. Flow to the chamber is from the main tank through a chlorinator and basket strainer.
- A 350 L waste sludge storage chamber that allows for settling and thickening of sludge for a period well in excess of 6 months before the need to pump out and dispose of the waste material.
- Air is supplied to the aeration chamber by a Rietschle Thomas LP-80HN air blower with an output of 77 litres / min. Air from the blower is also used to operate the decanter and to deliver waste sludge to the sludge storage chamber.
- An Ozzi Kleen submersible pump with level control and output of 100 litres / min @ 6 metres head supplies treated effluent for irrigation.
- A Alum dosing tank and unit is installed and a modified PCL controller is installed to alter the operation of the RP10A+ AWTS.

Schedule 2: Conditions of Accreditation

1.0 General

- 1.1 For each installation the owner/occupier of the premises shall make an application to the local council to install an Ozzi Kleen RP10A+ AWTS as a waste management facility in accordance with Section 68, Part C of the Local Government Act 1993 and Clause 26 of the Local Government (General) Regulation 2005.
- 1.2 The Ozzi Kleen RP10A+ AWTS shall be supplied, constructed and installed in accordance with the design as submitted and accredited by the NSW Ministry of Health.
- 1.3 Any modification or variations to the accredited design of the Ozzi Kleen RP10A+ AWTS shall be submitted for separate consideration and variation of the Certificate of Accreditation by the Secretary of the NSW Ministry of Health.
- 1.4 Each Ozzi Kleen RP10A+ AWTS shall be permanently and legibly marked on a non-corrosive metal plaque or equivalent, attached to the lid with the following information:
 - The brand name of the system;
 - The manufacturer's name or registered trademark;
 - The month and year of manufacture.

- 1.5 The manufacturer shall supply with each Ozzi Kleen RP10A+ AWTS an owner's manual, which sets out the care, operation, maintenance and on-going management requirements of the system.
- 1.6 The manufacturer shall provide the following information to each local council where it is intended to install an AWTS in their area once Ministry accreditation has been obtained:
- 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
 - A4 Plans
 - Accreditation documentation from NSW Health.

2.0 Installation and Commissioning

- 2.1 The local council should require that on completion of the installation of the Ozzi Kleen RP10A+ AWTS, the system is inspected and checked by the manufacturer or the manufacturer's agent. The manufacturer or the agent is to certify that the system has been installed and commissioned in accordance with its design, conditions of accreditation and any additional requirements of the local council.
- 2.2 The local council should require that all electrical work must be carried out by a licensed electrician and in accordance with the relevant provisions of AS/NZS 3000.

3.0 Maintenance

- 3.1 The local council shall require the owner/occupier of the premises to enter into an annual service contract with the manufacturer or supplier or a service agent authorised by the manufacturer or supplier.
- 3.2 The Ozzi Kleen RP10A+ AWTS shall be serviced at three monthly intervals in accordance with the manufacturer's or supplier's service manual.
- 3.3 Each three monthly services shall include a check on all mechanical, electrical and functioning parts of the system including:
- The chlorinator and replenishment of the disinfectant,
 - The Alum dosing tank and replenishment of Alum,
 - Irrigation pump and air blower,
 - The alarm system,
 - Built up of biosolids in aeration/sedimentation chamber,
 - Operation of the decanting cycle,
 - The effluent irrigation area,
 - On-site testing for free residual chlorine, pH and dissolved oxygen.
- 3.4 The local council should require that a service report sheet, in triplicate, is completed for each service. The original shall be given to the owner, the duplicate forwarded to the Council and the triplicate retained by the service contractor.

4.0 On-going Management

- 4.1 The owner's manual prepared by the manufacturer shall contain a plan for the on-going management of the Ozzi Kleen RP10A+ AWTS. The plan shall include details of:
- the treatment process,
 - procedures to be followed in the event of a system failure,
 - emergency contact numbers,
 - maintenance requirements,

- inspection and sampling procedures to be followed as part of the on-going monitoring program developed by the local council.

4.2 Effluent from the Ozzi Kleen RP10A+ AWTS taken in any random grab sample shall comply with the following standard:

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| • BOD ₅ | less than 30 mg/L |
| • TSS | less than 45 mg/L |
| • E.coli | less than 100 cfu/100 ml |
| • Free residual chlorine | greater than 0.5 and less than 2.0 mg/L |

5.0 Permitted uses

5.1 The effluent is suitable for re-use for garden purposes by way of any of the forms of irrigation as described in AS/NZS 1547:2000:

- above ground spray irrigation; or
- surface drip irrigation covered by mulch; or
- sub-surface drip irrigation installed at around 100 mm depth.

Each of the three forms of irrigation is subject to the approval of the local council.

6.0 Reduction in nutrient levels

A separate testing program of the Ozzi Kleen RP10A+ AWTS for total Nitrogen (TN) and total Phosphorus (TP) reduction by the addition of an Alum dosing tank and a modified Programmable Logic Controller (PLC) was conducted over six weeks at three separate single domestic swellings inhabited by 4 to 5 people. The testing methodology of AS/NZS1546.3:2008 was used. Testing was oversighted by a JAS-ANZ accredited product certification body.

Testing and analyses reported a TN reduction of up to 87% and a TP reduction of up to 84%.

Therefore the local council shall ensure that the Ozzi Kleen RP10A+is installed with an Alum dosing Unit and a modified PLC.

