



Health Protection Division  
Environmental Health Program  
2nd Floor, Casuarina Plaza  
258 Trower Road, Casuarina

**Postal Address:** PO Box 40596, CASUARINA NT 0811

**Tel:** (08) 8922 7152

**Fax:** (08) 8922 7334

**eMail:** [envirohealth@nt.gov.au](mailto:envirohealth@nt.gov.au)

**Our Ref:** DD2012/4742

Suncoast Waste Water Management  
59 Industrial Ave  
KUNDA PARK QLD 4556  
ATTENTION: MR MAL CLOSE

Dear Mr Close

**RE: PRODUCT APPROVAL FOR THE OZZI KLEEN GTS10  
GREYWATER TREATMENT SYSTEM**

Reference is made to your application for seeking product approval for the above system. This approval supersedes the product approval for the Ozzi Kleen GTS 10 Greywater Treatment System issued on 17 July 2007.

I advise that, pursuant to Public Health (General Sanitation, Mosquito Prevention, Rat Exclusion and Prevention) Regulation 26, a product approval is granted to market and sell the **Ozzi Kleen GTS 10 Greywater Treatment System** ("the system") in the Northern Territory.

The product approval number is 03/12.

**Description of the System**

The system is designed to treat all domestic greywater, excluding kitchen waste for a maximum of 10 persons. The system is contained in a single cylindrical vertical axis type roto-moulded polyethylene tank with a total design capacity of 4850 Litres

The treatment process within the system involves an aeration process consisting of three main cycles:

- **Aeration cycle:** The incoming greywater is aerated and oxygenated with air supplied by the air blower. The aeration cycle is maintained for a period of time to allow for biological breakdown of the organic waste and establish an activated sludge within the wastewater;
- **Settling cycle:** After the aeration cycle, aeration ceases for approximately 60 minutes, allowing the activated sludge to settle to the bottom of the aeration tank. A layer of clear effluent is formed at the top of the aeration tank.
- **Decanting cycle:** After a predetermined settling period, a decanting cycle takes place. The decanter device draws off the clear effluent from the top of the aeration tank. The decanting cycle continues until either the liquid level in the tank reaches the minimum level or the timer activates the system back into the aeration cycle.

While decanting the effluent is chlorinated and stored in a 520 litre (storage volume at decant level) effluent storage tank to ensure sufficient chlorine contact time prior to discharge. The operation of the submersible pump within the storage tank is controlled by a pressure switch and three float switches. When there is water demand from the services within the dwelling, the pressure switch senses the pressure drop and turns on the pump.

The three float switches within the storage tank are set at different levels to control the discharge from the submersible pump and the mains potable water as a make-up when required. Excess effluent can be directed to an irrigation system or through an overflow connected to the sewer.

## Conditions of Approval

### General

- Product approval is granted from the 17 July 2012 for a period of five years and will lapse unless renewed by the submission of an application and receipt of a product approval from the Director Environmental Health prior to the expiry date.
- The system shall be supplied, constructed and installed in accordance with the design as submitted to the Department of Health (DoH).
- The system shall be manufactured in accordance with the requirements of:
  - AS/NZS 1546.1.2008 as per SAI Global Standardsmark Licence SMKB20032; and
  - NSW Health DGTS:2005 as per SAI Global Standardsmark Licence SMKH20282.
- Any modification or variations to the design of the system shall be submitted for separate consideration by DoH.
- Lids and access openings are to be fitted so as to be childproof.
- The system must be fitted with an audio-visual alarm system installed in an appropriate location.
- Each system shall be permanently and legibly marked with the following information:
  - Brand name of the system;
  - Manufacturer's name or registered trademark; and
  - Month and year of manufacture.
- The system must comply with the provisions of the *Building Act* and *Public Health (General Sanitation, Mosquito Prevention, Rat Exclusion and Prevention) Regulations* that refers to the *Code of Practice for Small On-site Sewage and Sullage Treatment Systems and the Disposal or Reuse of Sewage Effluent* (the Code), the Administrative Procedures linked to the Code and any amendments to these documents.
- All pumps and controls supplied with the system are to be suitable and durable for their intended purposes and operating environment within the Northern Territory.
- DoH reserves the right to request from the manufacturer, results of field-testing of the system that were carried out for other Regulatory Authorities.

- Effluent from the system taken in **any random grab sample** shall comply with the following:
  - **5-day Biochemical Oxygen Demand (BOD<sub>5</sub>)** **less than 30 mg/L**
  - **Total Suspended Solids (TSS)** **less than 45 mg/L**
  - ***E.coli*** **less than 100 cfu/100ml**
  - **Free Available Chlorine (FAC)** **between 0.2 and 2.0 mg/L, where chlorination is the disinfection process.**
- DoH, by written notice, may cancel this product approval and require the repair, replacement, rectification, alteration of the system or part thereof:
  - Should the system or component thereof not be manufactured, installed and/or operated in accordance with the approval conditions; or
  - If the system is defective and not able to perform the function for which the approval is issued; or
  - If the system is operated in a manner that is prejudicial to public and environmental health or causes environmental nuisance; or
  - If the manufacturer fails to comply with one of more approval conditions; or
  - If the manufacturer within 30 days, fails to remedy a breach for which written notice has been given by DoH.

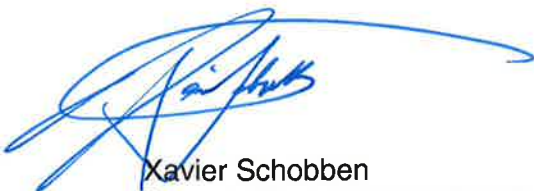
#### ***Installation, Operation and Maintenance***

- The entire system must be installed by a self-certifying plumber in accordance with the *Building Act* (within Building Control Areas) and the *Public and Environmental Health Act* (outside Building Control Areas). The Department of Lands and Planning (DLP) - Building Advisory Services can confirm the extent of NT Building Control Areas.
- The installation of each system shall comply with the manufacturer's installation instructions and shall comply with the minimum setbacks as specified in the Code.
- All electrical work must be carried out by a licensed electrician and in accordance with the relevant provisions of AS/NZS 3000.
- NT Local Government Authorities have no jurisdiction over the installation of onsite wastewater or greywater treatment systems.
- Officers from DoH or DoH delegated Health Authorities reserve the right to inspect installations and also to assess installation and their performance.
- The system is not to be installed in remote communities unless there is prior approval from DoH.
- Vehicular traffic is to be excluded from the area around the system.
- Cross connection of the system with the water supply for the premises must be prevented at all times. Backflow prevention devices are to be installed with DLP requirements.
- Commercial applications for the system will be dealt with on an individual basis and require Site Specific Design Approval by DoH.

- The manufacturer shall supply a copy of the system Installation Manual, Owners Manual and Operation & Maintenance Manual to the user / owner of the premises where the system is installed.
- The manufacturer must maintain records of all system installations in the NT and provide details to DoH upon request.
- The system once installed, must be maintained in a fully operational and sanitary state at all times by the user / owner in accordance with the product approval conditions, manufacturer's requirements and any other specific requirements by DoH.
- DoH requires that the owner/occupier of a premises enters into and maintains an annual service contract with the manufacturer or the manufacturer's appointed agent. If this is not practicable then DoH will consider an alternative arrangement.
- The system should be serviced at the intervals in accordance with the details set out in the service manual. Records are to be kept of all maintenance of the system and are to be maintained on-site. The local Environmental Health Office may request copies of the service records.
- Desludging is to be carried out in accordance with the manufacturer's instructions, though it is recommended that desludging not exceed 3 year intervals.
- The irrigation system is required to be installed prior to the use and commissioning of the system. The irrigation shall comprise:
  - surface drip irrigation covered by mulch; or
  - subsurface drip irrigation installed at approximately 100 mm depth; or
  - disposal to absorption trenches or evapotranspiration bed.

Note that spray irrigation is not permitted without prior permission from DoH.

Yours sincerely



Xavier Schobben  
Director Environmental Health  
Environmental Health

18 June 2012

cc Environmental Health Officers  
DLP - Building Advisory Services  
DCI - Construction Agency  
Power and Water Corporation