



Certificate of Accreditation

Sewage Management Facility

Wet Composting 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 2021.

System: *WORMWORX Biological Wet Composting System*

Manufacturer: *Zenplumb Pty Ltd*

Of: *PO Box 99, THE PATCH, VIC, 3792*

The WORMWORX Biological Wet Composting System as described in Schedule 1 has been accredited as a sewage management facility for use in single domestic premises in NSW. This accreditation is subject to the conditions of accreditation and permitted uses specified in Schedule 2.

P. Bylerfeld

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

Issued: *20 / Feb / 2023*

Certificate No: *WetCT026*

Expires: *31 December 2027*

Schedule 1: Specification

Description of WORMWORX Biological Wet Composting System

The WORMWORX Biological Wet Composting System is designed as a membrane Bio reactor. The WORMWORX Biological Wet Composting System can be configured as either an "all wastewater treatment system" or as a combination of a "composting/vermiculture and greywater treatment system".

The primary function of the WORMWORX Biological Wet Composting System is to accept domestic wastewater and organic waste which may be added to the filter bed through the compost bin located on top of the lid over the centrally located manhole cover. The organic waste is then processed through the metabolic function of the worms (Vermiculture) and other composting processes as well as filtering the wastewater through stratified layers of inorganic and organic materials in the filter bed.

The stratified inorganic and organic layers which provide the wastewater filtration, composting mass and vermin-bed is supported by a constructed separator, manufactured from rigid cellular material designed to take many tonnes of weight.

The separator suspends the filtration mass over a shallow wastewater storage area from where the wastewater is drained from the system by a 100mm outlet at the lowest edge of the tank. The wastewater is drained off to the distribution box and a land application system approved by the Local Council. The water quality can be assisted by allowing it to acquire an anaerobic state.

Airflow between the top and bottom section of the WORMWORX Biological Wet Composting System is maintained by connecting the two sections with a 100mm diameter PVC pipe. The wastewater storage area below the support structure is then vented to the atmosphere outside by a 100 mm diameter self-supporting PVC vent pipe. Ventilation is assisted with the use of a passive wind turbine located on top of the vent pipe.

The WORMWORX Biological Wet Composting System is assembled in:

- A 3000 litre capacity polymer tank manufactured by Everhard Industries Pty Ltd to AS/NZS 1546.1:2008 and configured either as a gravity or pump configuration.
- A 3200 litre capacity polymer tank manufactured by Reln Pty Ltd to AS/NZS 1546.1:2008 and configured either as a gravity or pump configuration.
- A 3200 litre capacity concrete tank manufactured by Hendriks Pty Ltd to AS/NZS 1546.1:2008 and configured either as a gravity or pump configuration.
- A 3200 litre capacity concrete tank manufactured by Icon-Septec Pty Ltd to AS/NZS 1546.1:2008 and configured either as a gravity or pump configuration.
- A 3600 litre capacity concrete tank manufactured by Icon-Septec Pty Ltd to AS/NZS 1546.1:2008 and configured either as a gravity or pump configuration.
- A 5000 litre capacity concrete tank manufactured by Hendriks Pty Ltd to AS/NZS 1546.1:2008 and configured either as a gravity or pump configuration.

The WORMWORX Biological Wet Composting System is classified as a wet composting toilet system that provides primary treatment only to the household wastewaters. The system is suitable for installation on domestic premises for a maximum of 10 persons and subject to the approval of the Local Council.

Schedule 2: Conditions of Accreditation

1. General

1.1 All applications for the installation of the WORMWORX Biological Wet Composting System shall be made to the local council in accordance with the requirements of the Local Government Act 1993 and Local Government (General) Regulation 2021.

1.2 The WORMWORX Biological Wet Composting System shall be supplied, constructed and installed in accordance with the design and specifications as submitted and accredited by the NSW Ministry of Health.

1.3 Tanks used in the assembly of the WORMWORX Biological Wet Composting System shall be manufactured in accordance with the requirements of the Standard AS/NZS 1546.1:2008.

1.4 Each WORMWORX Biological Wet Composting System shall be permanently and legibly marked on a non-corrosive metal plaque or equivalent, attached to the lid of the tank 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 When the WORMWORX Biological Wet Composting System requires emptying, all composted matter and other solid materials shall be removed from the system by an employee of Zenplumb Pty Ltd or a service contractor acceptable to the local council.

1.6 Unless otherwise directed by the local council, the composted waste material is to be disposed of by burial within the confines of the premises in soil, which is not intended to be used for at least three (3) months for the cultivation of food for human consumption. The minimum cover of soil over the deposited compost must be 100 mm.

1.7 The manufacturer shall supply with each WORMWORX Biological Wet Composting System an owner's manual, which sets out the care, operation, maintenance and on-going management requirements of the system.

2. Installation and Commissioning

2.1 The local council should require that on completion of the installation of the WORMWORX Biological Wet Composting System, 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. Permitted uses

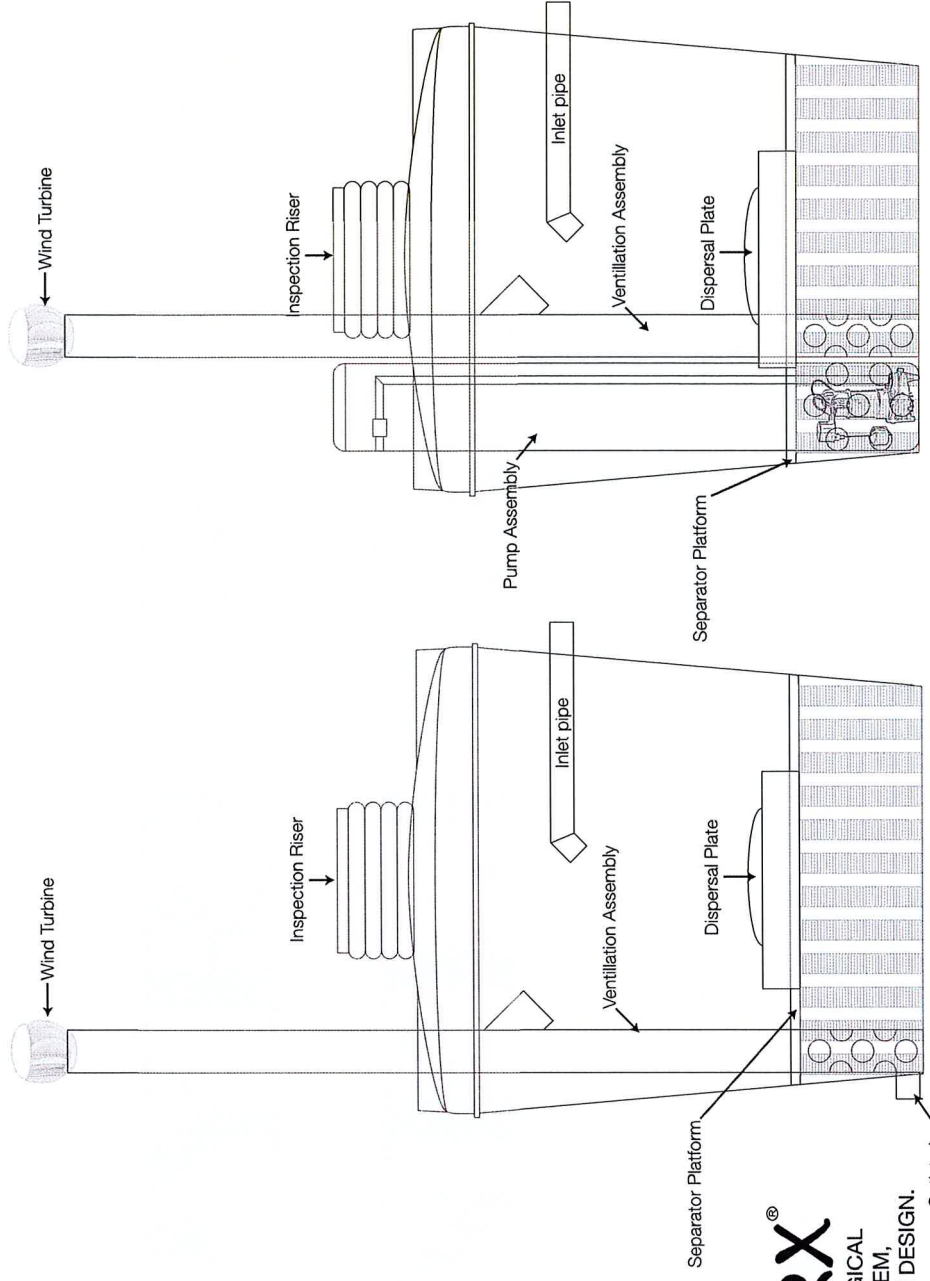
3.1 The treated effluent from the WORMWORX Biological Wet Composting System is suitable for disposal to:

- a LPED irrigation system installed strictly in accordance with the requirements set out in Appendix M of AS/NZS 1547:2012; or
- a sub-soil land application system of a type approved by the local council.

ACCREDITED
 20 FEB 2023
 NSW MINISTRY OF HEALTH



WORMWORX®
 WORMWORX IS A PASSIVE BIOLOGICAL
 WASTEWATER TREATMENT SYSTEM,
 INSPIRED THROUGH PERMACULTURE DESIGN.



WORMWORX® GRAVITY MODELS

WORMWORX® PUMPED MODELS

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ZENPLUMB® Pty, Ltd. www.zenplumb.com PO Box 7 support@zenplumb.com Yarra Junction VIC 3797 0408 335 612 Australia zenplumb®	WPT-3000L G WPT-3200L G WCT-3200L G WCT-3600L G WCT-5000L G	WPT-3000L P WPT-3200L P WCT-3200L P WCT-3600L P WCT-5000L P
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