

Certificate of Accreditation Sewage Management Facility Waterless Composting Toilet 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:

Nature Loo Excelet composting toilet system

Manufacturer: Ecoflo Wastewater Management Pty Ltd

Of:

6 Hurricane St, Banyo, QLD, 4014

The Nature Loo Excelet composting toilet system 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: 19 December 2019 Certificate No: WCT012 Expires: 31 December 2023

Schedule 1: Specification

Nature Loo Excelet composting toilet system

General Description

The Nature Loo Excelet composting toilet system is designed to receive and treat human waste from a single toilet pedestal. Organic material may be added to the composting wastes as a bulking agent at intervals specified by the manufacturer. The system is designed to reduce such wastes after a minimum composting period of 10 months into an innocuous relatively dry waste that is capable of being disposed of within the premises without nuisance or risk to health.

The Nature Loo Excelet composting toilet system is a batch process waterless composting system, constructed of UV stabilised medium density black polyethylene. The Nature Loo Excelet system consists of a fibreglass housing with a toilet seat attached and a number of 450 mm diameter and 530 mm high composting chambers. A barrier is fitted underneath the toilet seat to avoid the possibility of contact between a person and the compost pile. The "chamber screen" has been modified to a hands free mechanism operated by seat pressure. There is a 12 volt electrical exhaust fan feeding an external rigid plastic vent pipe. If mains power is not available the system is connected to solar power.

Each composting chamber contains a perforated floor, which allows urine to be collected in the base of the chamber. Most of the urine evaporates by virtue of the air circulation. Any remaining urine drains to a small absorption trench.

Air circulation is provided in the Nature Loo Excelet system by way of the 12-volt exhaust fan. Air is drawn through the toilet seat and chamber and is directed out the external vent pipe. A moisture trap is provided at the base of the vent pipe and a rain cap is fitted on the vent pipe just above the top of the roof.

Air circulation to the out of service chambers of the Nature Loo Excelet system is available as an option by way of a 12 volt powered fan ventilation system in lieu of the standard wind driven ventilator.

The Nature Loo Excelet system shall be supplied with a sufficient number of composting chambers according to the following table:

Permanent use: Intermittent use:

Up to 2 persons 4 chambers Up to 4 persons 4 chambers

Schedule 2: Conditions of Accreditation

1. General

- 1.1 For each installation the owner/occupier of the premises shall make an application to the local authority to install a Nature Loo Excelet composting toilet system 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 For each installation the application to the local authority shall include:
 - 1.2.1 Plans and specifications of the Nature Loo Excelet composting toilet system;
 - 1.2.2 A site plan drawn to scale showing the location and type of the proposed wastewater disposal system for the premises and state the method of disposal;
 - 1.2.3 A statement detailing the proposed method of disposal of the composted end product, the frequency of such disposal and the estimated volume of composted end product to be removed;
 - 1.2.4 A statement on whether the composting system is likely to produce a liquid component and how it is proposed to dispose of the liquid. The statement shall be supported by detailed plans of any necessary liquid disposal system.
- 1.3 Installation of the Nature Loo Excelet composting toilet system is restricted to the number of persons occupying the domestic premises as set out in the table attached to Schedule 1 and where in the opinion

- of the local authority the Nature Loo Excelet composting toilet system will be capable of providing satisfactory toilet accommodation.
- 1.4 A permanent notice with basic instructions shall be affixed to the unit in a prominent position. The permanent notice shall include provision for recording the date the last time humus material was removed from the composting chamber onto the composted end product tray.
- 1.5 The composted end product in the Nature Loo Excelet system shall be retained for a period of not less than 10 months before the first chamber is emptied. A statement to that effect must be included on any accompanying literature.
- 1.6 The manufacturer shall supply with each system a comprehensive manual with details of the maintenance procedures necessary to ensure the efficient and safe operation of the system.
- 1.7 The Nature Loo Excelet composting toilet system shall be installed and operated in accordance with the manufacturer's instructions and any conditions imposed by the local authority.
- 1.8 All wastewater shall be disposed of by means of a disposal system designed to the satisfaction of the local authority.

2. Installation and Commissioning

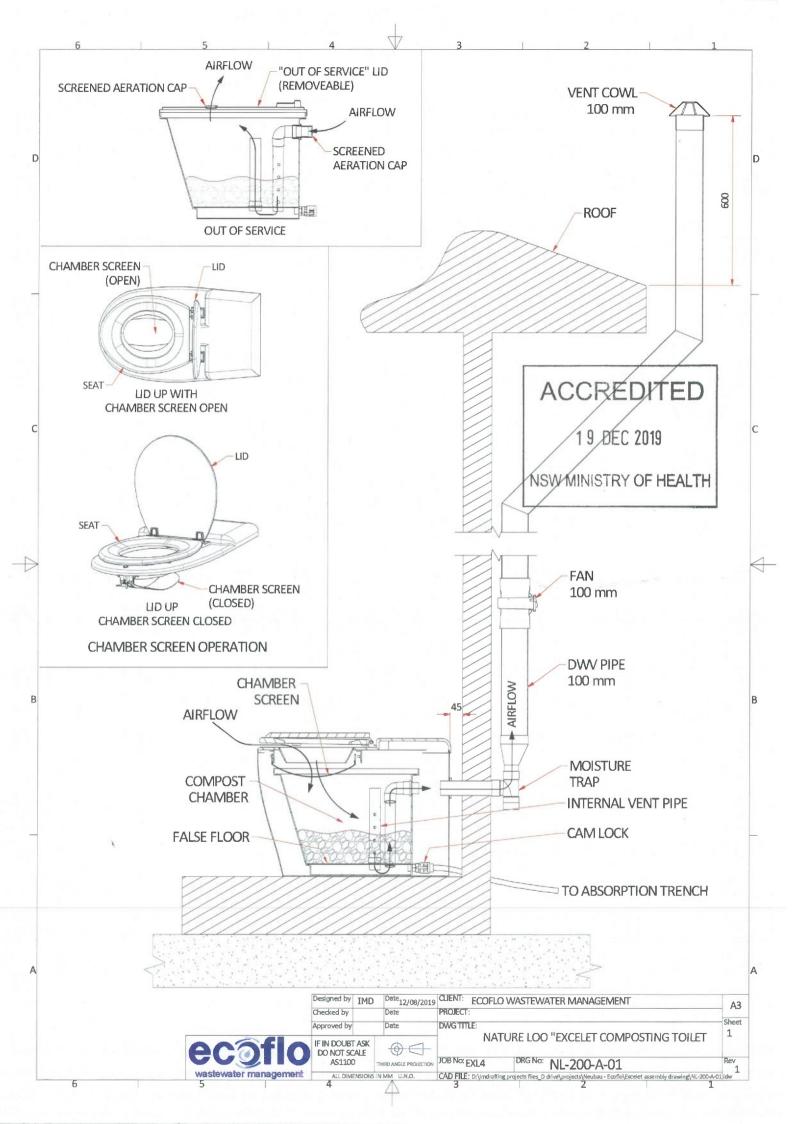
- 2.1 The local authority should require that on completion of the installation of the Nature Loo Excelet composting toilet system, the system is inspected and checked by the manufacturer or the manufacturer's agent. The manufacturer or the agent is to certify that the system has been installed and commissioned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

3. Maintenance

- 3.1 Material, which has been only partially composted, may only be removed from the Nature Loo Excelet composting toilet system with the written consent of the local authority. The local authority may issue instructions as to who may remove the humus and the method of disposal of the humus.
- 3.2 Unless otherwise directed by either the local authority or the NSW Ministry of Health the composted end product is to be disposed of by burial within the confines of the premises in soil, which is not intended to be used for the cultivation of food for human consumption. The minimum cover of soil over the deposited human must be 100 mm.
- 3.3 Alternatively the composted end product may be retained for an additional period of three months in a lidded compost bin. At the completion the humus may be used as a soil conditioner without any further treatment.

4. On-going Management

- 4.1 The owner's manual prepared by the manufacturer shall contain a plan for the on-going management of the Clivus Multrum Excelet composting toilet system. 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 authority.



ACCREDITED

6 DEC 2010

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