



Health

Certificate of Accreditation

Wet Composting Closet System

This Certificate of Accreditation is hereby issued by the Director-General of the NSW Department of Health pursuant to Clause 41(1) of the Local Government (General) Regulation 2005.

*System: **Biolytix model BF6 wastewater treatment system***

*Manufacturer: **Biolytix Pty Ltd***

*Of: **3 Cain Road, Penrose, Auckland, New Zealand***

This is to certify that the Biolytix model BF6 wastewater treatment 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 of the Certificate.

*Director, Environmental Health Branch
for Director-General (delegation PH335)*

Date of Issue: 6 December 2012

Certificate No: WCT 028

This Certificate of Accreditation is in force until 31 December 2015

Schedule 1: Specification

Description of Biolytix model BF6 wastewater treatment system

The Biolytix model BF6 wastewater treatment system is assembled in an AS/NZS 1546.1 accredited tank (typically an Everhard 3000 litres or 4000 litres polypropylene tank). The Biolytix model BF6 system consists of a filter bed and an effluent storage sump in the base of the tank. The pump discharge option includes a centrally located pump well.

The BF6 filter bed is made up of six alternating layers of drainage matrix elements and humus matrix elements. Both layers contain plastic filter media made up of chopped 65 mm long agricultural drainage pipe in open mesh bags. The humus layers also contain coco peat to increase the available treatment surface. The three drainage/humus double-layers are separated by a coarse mesh fabric screen.

A geotextile filter layer with a nominal pore size of 80 micron separates the filter bed from the effluent storage sump. Its purpose is to remove fine solids from the treated effluent. To support the filter bed the sump is filled to a depth of 300 mm with a matrix of plastic media. The effluent drains into the central pump well, from where the effluent is pumped using a submersible pump to a land application system of a type approved by the Local Council. The submersible pump is controlled by a high and low level float switch. The total depth of the filter bed and the sump is 1050 mm.

Wastewater is directed onto the filter bed where suspended particles are separated from the liquid under aerobic conditions. On commissioning the filter bed is inoculated with earthworms, which speed up the composting process. A Schego M2K3 air pump is used to provide additional air to the filter bed at a rate of 350 litres per hour.

The Biolytix model BF6 wastewater treatment system, installed without a disinfection process, is classified as a wet composting closet system. The Biolytix model BF6 wastewater treatment system is available as models BF6-3000 PAV and BF6-4000 PAV and is suitable for installation on domestic premises for a maximum of 10 persons and subject to the approval of the Local Council.

Example: The model BF6-3000 PAV uses a 3000 L tank, pumped effluent discharge, air pump aeration and an audio/visual alarm system.

Schedule 2: Conditions of Accreditation

1. General

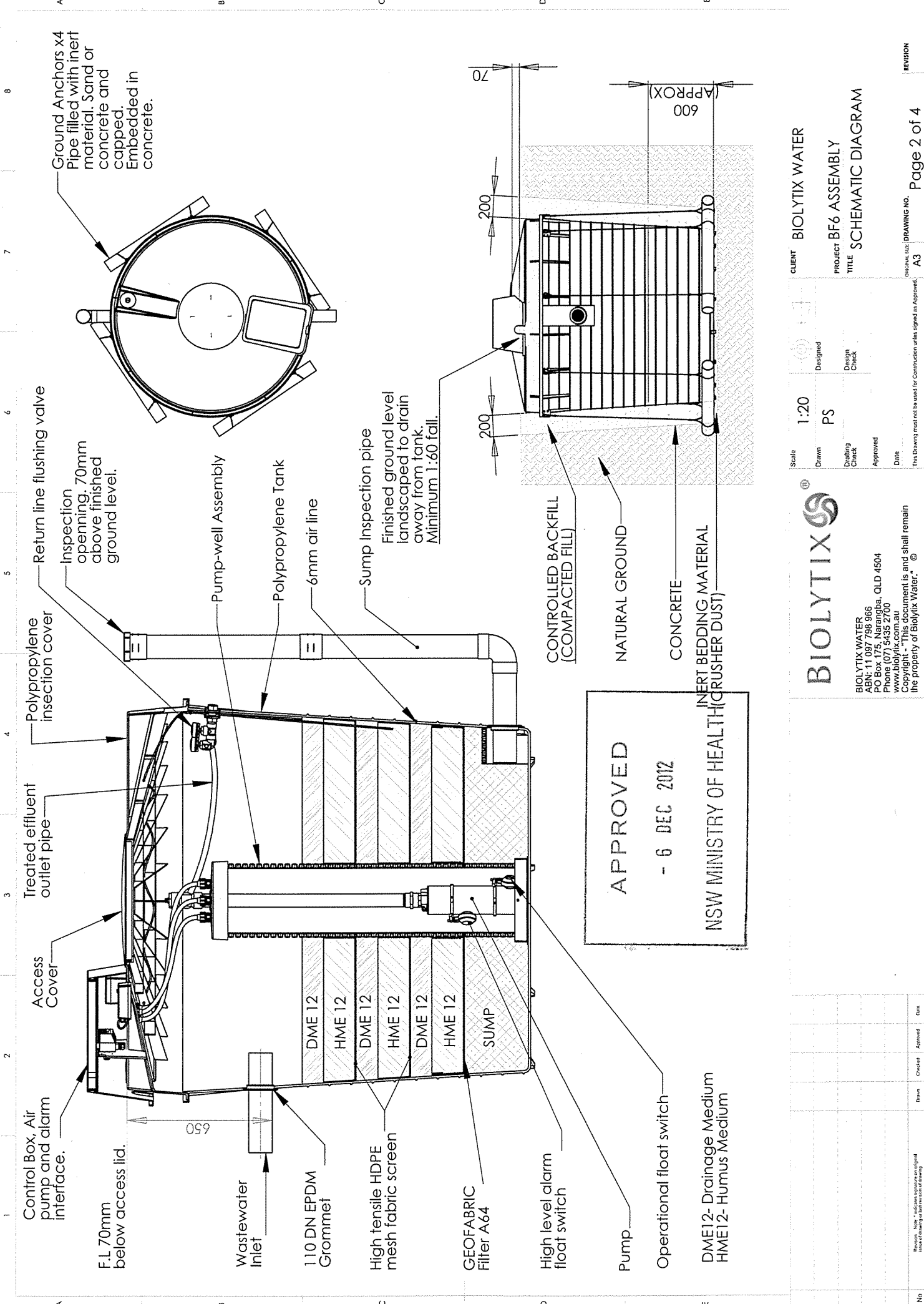
- 1.1 All applications for the installation of the Biolytix model BF6 wastewater treatment system shall be made to the Local Council in accordance with the requirements of the Local Government Act 1993 and Regulations.
- 1.2 The Biolytix model BF6 wastewater treatment system shall be supplied, constructed and installed in accordance with the design and specifications as submitted and accredited by the NSW Health Department.
- 1.3 Tanks used in the assembly of the Biolytix model BF6 wastewater treatment system shall be manufactured in accordance with the requirements of the Standard AS/NZS 1546.1-2008 and shall be subject to a Certificate of Accreditation issued by NSW Health. Where it is proposed to use an existing tank to retrofit a Biolytix model BF6 wastewater treatment system, the tank shall be of a sound condition and deemed to be suitable for a retrofit by the Local Council.
- 1.4 Each Biolytix model BF6 wastewater treatment 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 Biolytix model BF6 wastewater treatment system requires emptying, all composted matter and other solid materials shall be removed from the system by an employee of Biolytix 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 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 Biolytix model BF6 wastewater treatment 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.
- 2.3 The Biolytix model BF6 wastewater treatment system shall be fitted with an alarm system to indicate an electrical or mechanical malfunction. The alarm system is either an onsite audio/visual alarm system or connected remotely by telephone to the office of Biolytix Pty Ltd or its nominated representative in NSW ensuring a direct response to a malfunction of the system.

3. Permitted uses

- 3.1 The treated effluent from the Biolytix model BF6 wastewater treatment 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.



Scale	1:20	Designed	
Drawn	PS	Design Check	
Drafting Check		Approved	
Date			

CLIENT: BIOLYTX WATER
 PROJECT: BF6 ASSEMBLY
 TITLE: SCHEMATIC DIAGRAM

Original size: A3
 Drawing No.: Page 2 of 4

This Drawing must not be used for Construction unless signed as Approved.

BIOLYTX

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No	Revision	Note	Drawn	Checked	Approved	Date