

# NSW HEALTH

## Certificate of Accreditation

### Aerated Wastewater Treatment 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: Aqua-Nova 10EP AWTS*

*Manufacturer: Everhard Industries Pty Ltd*

*Of: 405 Newman Road, Geebung, QLD, 4034*

*This is to certify that the Aqua-Nova 10EP 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, and in accordance with the Sewage Management Facility Accreditation Guideline, May 2005.*



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

*Date of Issue: 14 March 2008*

*Certificate No: AWTS 006*

**This Certificate of Accreditation is in force until 31 December 2012**

## Schedule 1: Specification

The Aqua-Nova 10 EP Aerated Wastewater Treatment System (AWTS) is designed to treat the wastewater from a residential dwelling occupied by a maximum of 10 persons. The Aqua-Nova 10 EP AWTS is contained in vertical axis type cylindrical precast concrete or injection moulded polypropylene septic tanks and collection wells each with design capacities as set out below.

The Aqua-Nova 10 EP AWTS is assembled in the following configurations:

Design capacities	polymer 2 x 3000lt 80202	polymer 2 x 3900lt 80203	concrete 2 x 3000lt	concrete 2 x 3900lt
primary sedimentation	3000 lt	4175 lt	3000 lt	3587 lt
• partition	yes	yes	yes	yes
secondary treatment	3000 lt	3340 lt	3075 lt	3490 lt
• aeration chamber	1985 lt	3010 lt	2253 lt	2630 lt
• sedimentation	430 lt	430 lt	430 lt	430 lt
• irrigation	393 lt	393 lt	393 lt	393 lt
emergency storage	1000 lt	1052 lt	1095 lt	1040 lt
operational water level	(mm)	(mm)	(mm)	(mm)
• primary	1385	1770	1510	1500
• secondary	1350	1730	1510	1400

- A chlorine disinfection unit is installed on the outlet of the clarifying chamber.
- Air is supplied to the contact aeration chamber by a Nitto LA80-A air blower or equivalent, producing an airflow of a nominal 100 litres/minute at 1.3 m water depth.
- A Davey model D-25A submersible irrigation pump or equivalent is installed in the irrigation chamber.

## **Schedule 2: Conditions of Accreditation**

### **1.0 General**

- 1.1 For each installation the owner/occupier of a premises shall make an application to the Local Authority to install a Aqua-Nova 10EP AWTS as a waste management facility in accordance with Section 68, Part C of the Local Government Act 1993 and Clause 28 of the Local Government (General) Regulation 2005.
- 1.2 The Aqua-Nova 10EP AWTS shall be supplied, constructed and installed in accordance with the design as submitted and accredited by the NSW Department of Health.
- 1.3 Any modification or variations to the accredited design of the Aqua-Nova 10EP AWTS shall be submitted for separate consideration and variation of the Certificate of Accreditation by the Director-General of the NSW Department of Health.
- 1.4 Each Aqua-Nova 10EP 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 Aqua-Nova 10EP 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 authority where it is intended to install an AWTS in their area once Departmental 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 Council should require that on completion of the installation of the Aqua-Nova 10EP 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 Council.
- 2.2 The 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 Council shall require the owner/occupier of a premises to enter into an annual service contract with a representative of Everhard Industries Pty Ltd or a service contractor or company acceptable to the Council.
- 3.2 The Aqua-Nova 10EP AWTS shall be serviced at three monthly intervals in accordance with the details set out in the owner's and service manual.
- 3.3 Each three monthly service shall include a check on all mechanical, electrical and functioning parts of the system including:
  - The chlorinator and replenishment of the disinfectant,
  - Pumps, air blower, fan or air venturi,
  - The alarm system,
  - Slime growth on the filter media,
  - Operation of the sludge return system,
  - The effluent irrigation area,
  - On-site testing for free residual chlorine, pH and dissolved oxygen.
- 3.4 The 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 Aqua-Nova 10EP 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 authority.
- 4.2 Effluent from the Aqua-Nova 10EP AWTS taken in any random grab sample shall comply with the following standard:
- BOD<sup>5</sup> less than 30 mg/L
  - SS less than 45 mg/L
  - Thermotolerant coliforms less than 100 cfu/100 ml
  - Free residual chlorine greater than 0.2 and less than 2.0 mg/L

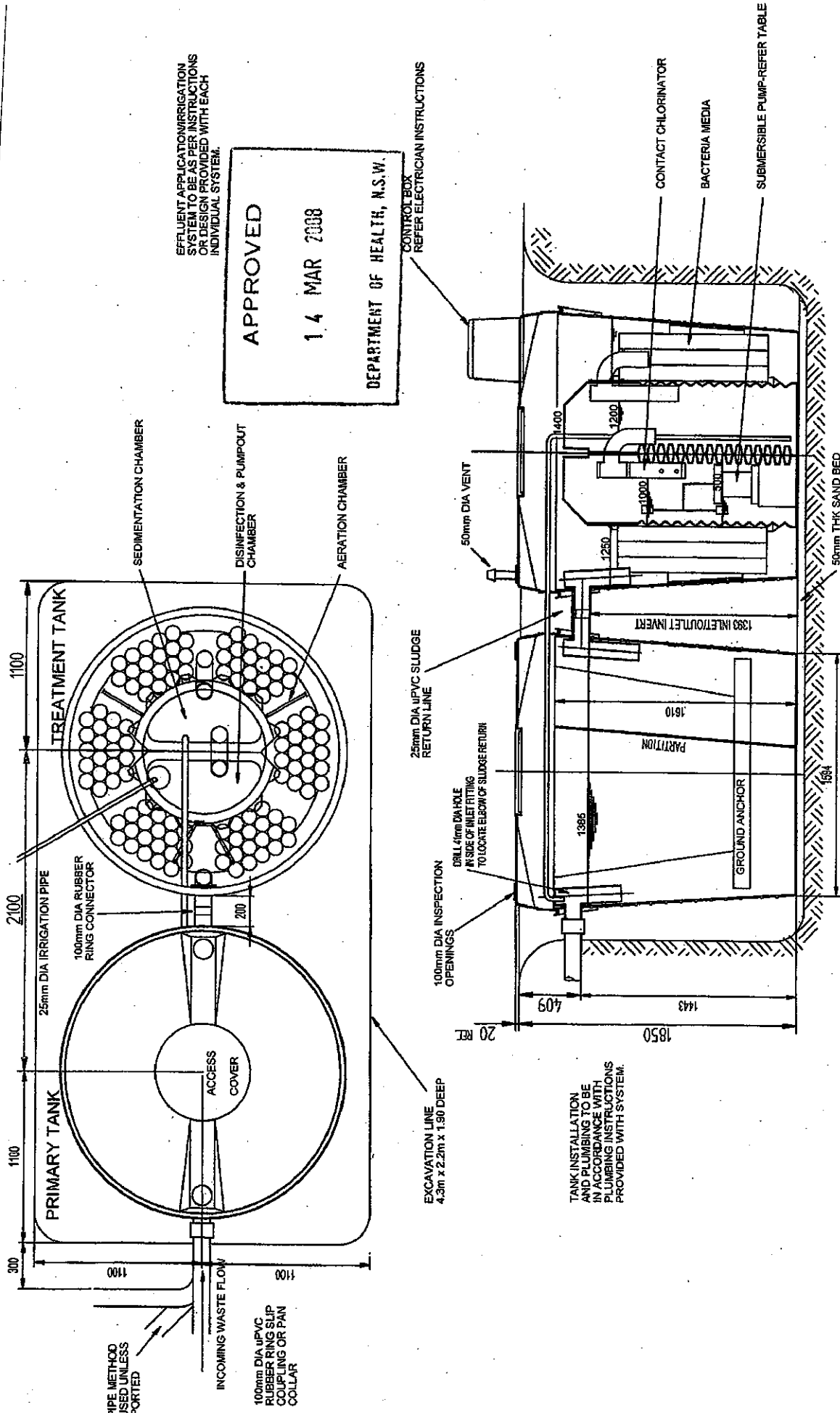
#### **5.0 Permitted uses**

- 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 Council.







EFFLUENT APPLICATION/IRRIGATION SYSTEM TO BE AS PER INSTRUCTIONS OR DESIGN PROVIDED WITH EACH INDIVIDUAL SYSTEM.

**APPROVED**

**14 MAR 2008**

**DEPARTMENT OF HEALTH, N.S.W.**

CONTROL BOX REFER ELECTRICAL INSTRUCTIONS

THIS INLET PIPE METHOD NOT TO BE USED UNLESS PIPE IS SUPPORTED

INCOMING WASTE FLOW

100mm DIA UPVC RUBBER RING SLIP COUPLING OR PAN COLLAR

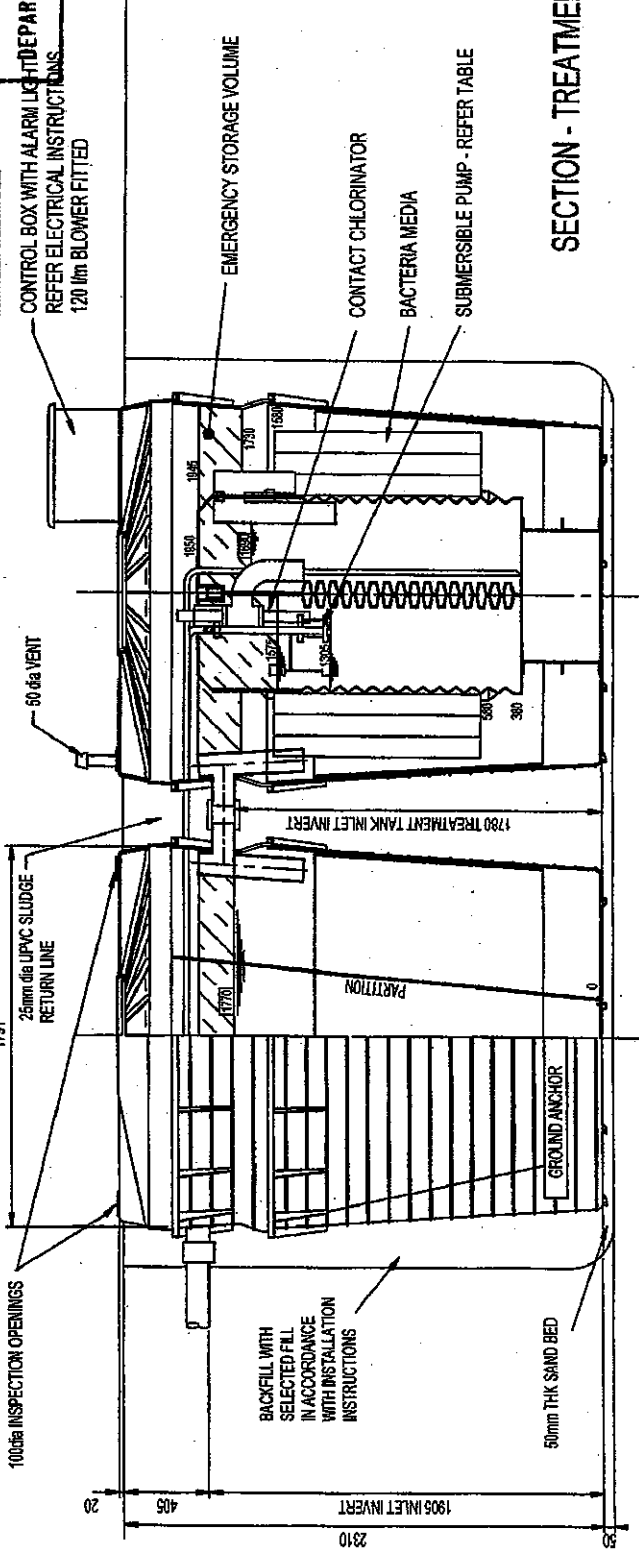
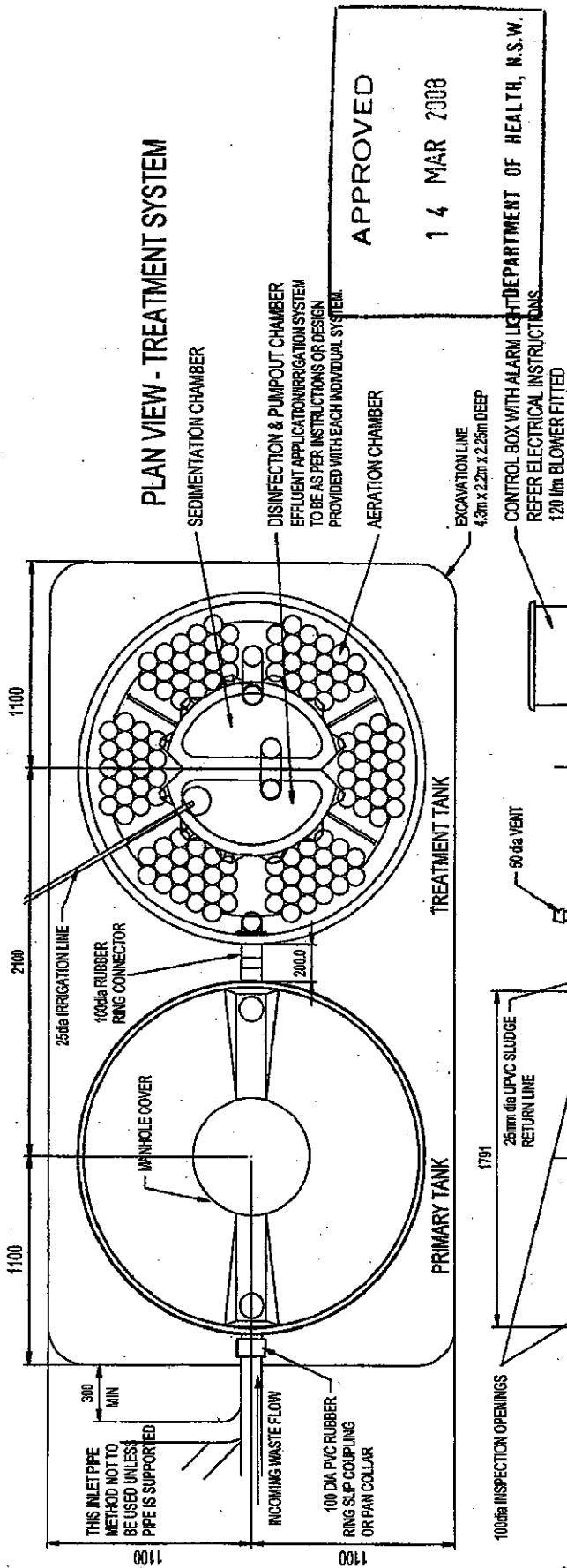
EXCAVATION LINE 4.3m x 2.2m x 1.90 DEEP

TANK INSTALLATION AND PLUMBING TO BE IN ACCORDANCE WITH PLUMBING INSTRUCTIONS PROVIDED WITH SYSTEM.

AMENDMENT 1	3-3-2008	VARIOUS CODES FOR DIFFERENT PUMPS ADDED	B.I.D.
DRAWN	DATE	APPROVED FOR MANUFACTURE	SCALE
B.I.D.	24-2-99	NATURAL	1:25
TITLE		PROJECT NO.	REFER TABLE
AQUANOVA AWMT'S SYSTEM		405 KERRIMORE ROAD, GERRINGBA, VIC 3044	
2 x 3000 l POLYMER 'SOUTH' TANK SYSTEM		PH: (07) 9571 0444	
NSW & VIC EPA 8 E.P. APPROVED		FAX: (07) 3265 2111	
PRODUCT CODE No.	80202	REVISION	1
DESCRIPTION	Davey 25 Pump fitted	DATE	3/3/08
	Claytons Blue Diver 30 Pump fitted		
	Davey 42 Pump fitted		
	Aeration tank only		

PRODUCT CODE No.	80106
DESCRIPTION	Aeration tank only
PROJECT NO.	M - 5108
DATE	3/3/08
SCALE	1:25
REFER TABLE	

TANK INSTALLATION AND PLUMBING TO BE IN ACCORDANCE WITH PLUMBING INSTRUCTIONS PROVIDED WITH SYSTEM.



**APPROVED**  
 14 MAR 2008

AMMENDMENT 2		PRODUCT CODES/PUMP DETAILS ADDED		BJD	3-3-08
DRWING	B.D.	DATE	10/9/07	APPROVED FOR MANUFACTURE	
TITLE		AQUANOVA POLYMER TANK AWTS TREATMENT SYSTEM		EVERHARD INDUSTRIES PTY LTD	445 NEWMAN ROAD, GERRING HILL, VIC 3044 PH (07) 3857 6444 FAX (07) 3285 2311
PROJECT CODE		M - 5815		REVISION	2
PROJECT NO.		80203		SCALE	1:25
PROJECT NAME		M - 5815		DATE	3-3-2008

PRODUCT CODE No.	DETAILS / DESCRIPTION
80203	DAVEY 25 PUMP FITTED
80203C	CLAYTONS BLUE DIVER 30 PUMP FITTED
80203D	DAVEY 42 PUMP FITTED