Building Act 2016

Director's Determination - Accreditation and Maintenance of Plumbing Installations

I, Dale Edward Webster, in my capacity as Director of Building Control, and acting pursuant to section 20(1)(d) of the Building Act 2016, hereby make the following Determination.

| Determination title | Accreditation and Maintenance of Plumbing Installations | | |
|-----------------------------|---|--|--|
| Description | This Determination specifies in Schedule 1 the: | | |
| | a) Use, maintenance, monitoring and management of plumbing installations. | | |
| | b) Matters I will consider when assessing an application made in accordance with Section 18 of the <i>Building Act</i> 2016 for accreditation of a plumbing installation. | | |
| Version | Final December 2016 v1.0 | | |
| Application | For the purposes of 20(3)(b) of the Act, this Determination applies from the date of its approval until its revocation. | | |
| Date of Director's approval | 12/12/2016 | | |

Dale Edward Webster

Director of Building Control

This Determination is issued pursuant to the anticipatory powers provision of section II(I) of the Acts Interpretation Act 1931



Schedule I – Accreditation, Maintenance and Use of Plumbing Installations

I. Purpose

To specify the required maintenance and use of plumbing installations, the plumbing installations that require accreditation and the accreditation application process and assessment criteria.

2. Application

This Determination applies to the following plumbing installations:

- Aerated wastewater treatment systems;
- Greywater treatment systems;
- Grease traps (not connected to TasWater infrastructure);
- Septic tanks
- Backflow prevention devices;
- Thermostatic mixing valves;
- Any wastewater treatment system that produces secondary standard wastewater;
- Devices for treating or disinfecting potable water; and
- Sewage, greywater or wastewater holding and pumping stations / chambers

3. Definitions

| Aerated Wastewater treatment system (AWTS) | Has the same meaning as described in AS/NZS1546.3 |
|--|--|
| Backflow prevention device | Has the same meaning as described in AS/NZS 3500.0 Glossary of terms |
| Certificate of Accreditation | Mean a certificate issued by the Director of Building Control under Section 18 of the Building Act 2016 |
| Composting toilet | Has the same meaning as described in AS/NZS1546.2 |
| EPA | Means the Environment Protection Agency of Tasmania |
| Grease Trap | Is a plumbing product used for the removal of fat, oil and grease from wastewater |
| JAS-ANZ | Joint accreditation system of Australian and New Zealand |
| Loading certificate | Is a document prepared by the designer of an OWMS specifying design criteria and limitations associated with the use of the installation |
| Licenced Plumber | Means a plumber with an occupational licence issued under the Occupational Licencing Act 2005 |
| Maintenance person | Is a person with skills, knowledge, experience and qualifications determined by the Director of Building Control |

| OWMS | Is an on-site wastewater management system as defined by the Building Act 2016 |
|--------------------------------------|---|
| Operation and maintenance procedures | Are procedures prepared by the designer or manufacturer of a plumbing installation specifying how to operate and maintain the plumbing installation |
| Secondary standard wastewater | Is wastewater with a Suspended Solids of $20mg/L$, Biochemical Oxygen demand (BOD ₅) of $30mg/L$ and thermotolerant coliforms of <10 organisms/100mls (if disinfected) |
| Septic tank | Has the same meaning as described in AS/NZS1547:2012 |
| Septic tank system | is an OWMS comprising a septic tank and land application area (absorption trench, sand mound, evapo-transpiration bed or the like) |
| Schedule of maintenance | Is a schedule of required maintenance of essential building services specified in Regulation 72 of the Building Regulations 2016 |
| Thermostatic mixing valve | Has the same meaning as described in AS/NZS 3500.0 Glossary of terms |

4. Use of the determination

This determination specifies:

- The required and recommended use and maintenance of plumbing installations as contained in Table I. The first column specifies the type of plumbing installation and the second column identifies the required maintenance and use. Recommended maintenance is listed in the third column. The persons that are permitted to perform the maintenance are specified in column four.
- 2. Matters that the Director of Building Control will take into consideration before issuing an accreditation for a plumbing installation.

5. Maintenance of Plumbing Installations

5.1 Operation and maintenance

A property owner (or tenant if they have a contractual responsibility to maintain plumbing installations) with responsibility for a type of plumbing installation specified in Table I must ensure that the installation is maintained in accordance with the relevant requirements listed in the Required Maintenance column (two). The operation and maintenance work must be completed by a competent person listed in the Maintenance Person column (four).

A plumber installing a plumbing installation must provide the owner with operation and maintenance procedures. If the installation is an OWMS a loading certificate must be provided by the designer in a format consistent with clause 7.4.2 of AS/NZS1547:2012.

Compliance with recommended maintenance specified in Table I is evidence of compliance with an owner's responsibilities under Section 50(4)(a) and Regulation 73 of the *Building Regulations* 2016.

The schedule of maintenance required by Section 206 must include the relevant plumbing items specified by the permit authority in the certificate of likely compliance (plumbing

work) and be approved by the Building Surveyor. This determination specifies the required maintenance and who may perform the maintenance.

5.2 Qualifications required for maintenance of aerated wastewater treatment systems

A person must not undertake the servicing or maintenance of an aerated wastewater treatment system unless that person is a licensed Plumbing Contractor with a drainage endorsement: onsite wastewater management systems maintenance, issued under the *Occupational Licensing Act* 2005.

A plumbing contractor may employ an AWTS maintenance technician to service and maintain aerated wastewater treatment systems providing (as a minimum) that the technician works under the supervision of the plumbing contractor and has completed a qualification or training course approved by the Administrator of Occupational Licensing. The following are approved courses or qualifications:

- Centre for Environmental Training AWTS servicing and maintenance 3 day course
- QLD334WE01B Maintain and service domestic treatment plants and on-site sewerage facilities

A plumbing contractor who employs AWTS services technicians must keep a register of those technicians and their training records and provide a copy of the register to the Director of Building Control and Administrator of Occupational Licensing by no later than the 30^{th} of June each year.

6. Accreditation of Plumbing Installations

6.1 Plumbing installations requiring accreditation

A responsible person must not install an on-site wastewater management system specified in this clause unless a certificate of accreditation has been issued by the Director in accordance with Section 18 of the *Building Act 2016*. Accreditation is not required for unique on-site wastewater management system as defined by Regulation 3 of the *Building Regulations* 2016 if the permit authority has issued a plumbing permit.

The following types of on-site wastewater management systems require accreditation by the Director:

- AWTS;
- Composting toilets or other waterless toilets treatment systems;
- Greywater treatment systems, other than diversion devices that only remove gross solids; and
- Any other wastewater treatment system that produces or intends to produce secondary standard wastewater which is applied to the land or discharged into a watercourse (where permitted).

6.2 Process for applying for accreditation

An applicant for accreditation must:

- Complete prescribed application form; and
- Provide the specified documents.

6.3 Evidence of compliance

A certificate (including the testing report) from a JAS-ANZ accredited agency certifying that the system is compliant with the relevant Australian Standard and National Construction Code (NCC) is evidence of compliance, providing that the testing has been completed in climatic conditions similar to Tasmanian. Systems tested in climate zone 7 (as specified in the NCC) are indicative of the range of temperatures typically experienced in Tasmania.

If testing has not been undertaken in 'climate zone 7' conditions the applicant will need to provide evidence in the form of testing or expert independent opinion that demonstrates that the system is capable of complying with the performance criteria specified in AS/NZS1546.2, AS/NZS1546.3 or AS/NZS1546.4, as appropriate.

If the system is installed in another jurisdiction evidence of compliance with the respective conditions of accreditation or approval will be required.

6.4 Relevant matters that are considered before accreditation will be granted

The Director will take the following matters into consideration when deciding if a proposed plumbing installation should be accredited for use in Tasmania:

- Are the climatic conditions under which the testing was completed relevant to Tasmania?
- Evidence of approvals or authorisations from other Australian States or Territories;
- How was the system tested if there isn't an appropriate Australian Standard?
- The performance of the system if approved in other jurisdictions;
- Is the system based on established technology or is it a totally new technology?
- Is satisfactory information provided for the ongoing, operation, maintenance and management of the system; and
- Details of servicing and maintenance requirements and what skills and knowledge are required to service and maintain the system.

6.5 Conditions of accreditation

If the Director decides to issue a certificate of accreditation the Director may impose conditions with respect to the terms under which the installation is to be installed, used, managed, monitored and maintained.

The Director reserves the right to:

- suspend or revoke a certificate of accreditation if the person / business who issued the accreditation is not complying with a condition of accreditation;
- place conditions that require auditing, testing or monitoring of systems that have been installed; or
- require that a system be placed on trial for a defined period of time to monitor performance.

6.6 Term of accreditation

A certificate of accreditation unless suspended, conditioned or revoked will remain in force for a maximum period of 5 years.

6.7 Re-Accreditation

If an OWMS is currently accredited and re-accreditation is being sought (approaching the end of the 5 year term) evidence will need to be provided by the manufacturer that the existing installed OWMS are complying with the conditions of the accreditation. A report from a third party assessor approved by the Director of Building Control must be provided.

Table I - Maintenance of Plumbing Installations

| Column I | Column 2 | Column 3 | Column 4 |
|---|--|---|---|
| Plumbing Installation | Required Maintenance and use | Recommended Maintenance | Maintenance Person |
| Aerated Wastewater Treatment System or greywater treatment system | Serviced at intervals specified in the certificate of accreditation or at a | | Plumber Contractor(wastewater endorsement) |
| | frequency specified in the plumbing permit The property owner must have a maintenance contract with a maintenance person | | AWTS Maintenance Technician working for and under the supervision of a Plumber Contractor (wastewater |
| | (Plumber Contractor). A copy of a service report must be provided to the relevant local council | | endorsement) |
| | The effluent discharging from the system must comply with the effluent quality specified in the certificate of accreditation | | |
| Septic tank system | Maintained in accordance with the schedule of maintenance issued in accordance with section 206 of the Building Act 2016 | Septic tank pumped out at least every 5 years (or as specified by the designer of the septic tank system) when the building has been permanently occupied | Septic tank pumping contractor licensed by the EPA |
| | | Outlet filter(where installed) cleaned every 12 months | Owner or competent person |
| Unique On-site wastewater Management System | Maintained in accordance with the schedule of maintenance specified by the permit authority in the plumbing permit | | Plumber Contractor(wastewater endorsement) |
| Wastewater land application area (absorption trenches, mounds or | Buildings, structures, driveways, parking areas or motor vehicles must not be located over the wastewater land application without | Maintenance of vegetation over and around land application Every 12 months | Owner or competent person |
| irrigation areas) | permit authority authorisation | inspect upslope cut- off and sub-soil | |

| Column I | Column 2 | Column 3 | Column 4 |
|---|---|--|---|
| Plumbing Installation | Required Maintenance and use | Recommended Maintenance | Maintenance Person |
| | | drains are functional and not silted up. | |
| Grease interceptor trap (if installed as part of an OWMS) | Maintained in accordance with the schedule of maintenance issued in accordance with section 206 of the Building Act 2016 | Pumped out annually or more frequently depending on the size and class of building where the trap exists | Septic tank pumping contractor licensed by the EPA |
| Trade waste (if installed as part of an OWMS) | Serviced annually or more frequently if specified in the schedule of maintenance issued in accordance with section 206 of the Building Act 2016 | | Competent person |
| Wastewater pump chamber (discharge to an OWMS) | Maintained in accordance with the schedule of maintenance issued in accordance with section 206 of the Building Act 2016 | Service the wastewater pump and clean the automatic float annually. | Licensed Plumber |
| | | Check the audible / visual alarm is functioning. | |
| Composting toilet | Removal of compost from the composting chamber in accordance with the manufacturer's operation and maintenance procedures | At least every 12 months check that the exhaust fan (if fitted) is functional | Resident / owner / competent person |
| Sewage holding tank (pump out system) | Maintained in accordance with the schedule of maintenance issued in accordance with section 206 of the Building Act 2016 | | Licensed Plumber and electrician (for electrical components only) |
| | Pumped out by a septic tank pumping contractor as specified by the permit authority | | |
| | The property owner must have a written agreement with a septic tank pumping contractor for the regular | | |

| Column I | Column 2 | Column 3 | Column 4 |
|---|--|--------------------------------------|---|
| Plumbing Installation | Required Maintenance and use | Recommended Maintenance | Maintenance Person |
| | removal of sewage | | |
| | Components serviced annually including alarms and telemetry | | |
| | The property owner must have a written agreement with a competent person for the maintenance of all plumbing and electrical components | | |
| Sewage holding tank (pumped to a sewerage system or OWMS) | Maintained in accordance with the schedule of maintenance issued in accordance with section 206 of the Building Act 2016 | | Licensed Plumber and electrician (for electrical components only) |
| | Components serviced annually including pumps, alarms, telemetry, reflux valve and the float switch on the pump | | |
| Stormwater holding tank (for pumping water to a stormwater disposal system) | Maintained in accordance with the schedule of maintenance issued in accordance with section 206 of the Building Act 2016 | | Licensed Plumber and electrician (for electrical components only) |
| | Components serviced annually including alarms, telemetry, reflux valve and float switch on the pump if fitted | | |
| Stormwater pre- treatment devices installed to remove sediment before discharge to a municipal stormwater drain or watercourse | | Serviced annually to remove sediment | Resident / owner / competent person |
| Potable water treatment system (including disinfection) on a private water supplier registered under | Maintained in accordance with the: • Schedule of maintenance issued in accordance with Section 206 of the | | Resident / owner / competent person |

| Column I | Column 2 | Column 3 | Column 4 |
|-------------------------------------|---|----------------------------|---|
| Plumbing Installation | Required Maintenance and use | Recommended Maintenance | Maintenance Person |
| the Public Health Act 1997 | Building Act 2016 The plumbing permit; and The manufacturer's recommended maintenance | | |
| Testable backflow prevention device | Serviced annually by an appropriately licensed plumber | | Licensed Plumber Practitioner (certifier) Water Plumbing (backflow prevention endorsement) |
| Thermostatic mixing valve | Serviced annually by an appropriately licensed Plumber | | Licensed Plumber Practitioner (certifier) Water Plumbing (heated water and temperature control) |