



## **FACTSHEET**

### **Wastewater Works Approval**

As of the June 2013, the new SA Public Health Act 2011 and the SA Public Health (Wastewater) Regulations 2013 become operational in their entirety. Along with these two new pieces of legislation, a new On-site Wastewater Systems Code also came into force.

The new code encompassed some changes to the process of submitting applications for installations & or alterations to septic tank & aerated systems. **Major changes included;**

- **a new application form & approval format;**
- **an report from a suitably qualified wastewater engineer providing evidence demonstrating a sites suitability for the proposed system, and**
- **a requirement for the nominated plumber to provide a certificate of compliance and as constructed plan to Council at the end of the job, which includes signing off on the installation of the aerated systems irrigation area.**

Since the changeover occurred, clarification has been gained from the Department of Health as to what is now required from the suitable qualified engineer. In addition to the requirement stated above, the engineers report must also provide a full design for the land application system. Engineers can either design the full system themselves, or sign off on a design from another person.

It is important to note that the requirement for what needs to be installed for an on-site waste disposal system has not changed, these procedural changes are a more structured way of ensuring that what is installed meets those requirements. Also it ensures that plumbers know what and how to install the approved system, which they are now required to install completely and provide a Certificate of Compliance for at the end of the job.

#### **What is required in the Site & Soil Report?**

As stated above, an engineer must provide evidence demonstrating a site suitability for the proposed system. This is usually through conducted a site & soil evaluation on the property of concern. This will allow the engineer to assess the sites ability to sustain the proposed type of on-site disposal system or to recommend another type of system. From there the engineer must also either design an appropriate disposal system, (for example trench designs or irrigation design) or sign off on a system designed by someone else. By doing this they are endorsing that that design should feasibly work on that site taking into account the soil sampling they have already conducted.

It should also be noted that there are other approved system types other than Septic Tanks and Aerobic systems that are permitted to be installed in South Australia on varying land types. A wastewater engineer will have the knowledge to investigate other options.

See the attached table, which is an except from the code listing what information the engineer must provide in their report.

### What details is required in the design of the disposal system?

- The role of Council's Environmental Health Officer (EHO) is to determine if the proposed system is in accordance with the legislation and could reasonably be expected to work. Therefore it is the role of the engineer to ensure and demonstrate to the EHO that it will work.
- The idea is that the disposal system is designed (or signed off) by an engineer and installed by a plumber. Sufficient detail must be provided in the design drawing to allow the plumber to install the system without making design decisions.

### Septic Tank & Soakage Trench Systems

It is assumed that most plumbers in the South East are familiar with the design & installation requirements of a standard soakage trench. Therefore, a longitudinal drawing of a trench should not be difficult to provide, along with a site plan indicating the trench layout and position. In addition to the normal requirements showing that the setback requirements have been achieved.

### Aerobic Tank & Irrigation Systems

Council will no longer accept site plan drawings that show an irrigation area as a box with the only details provided being the size of the area. The following information must be shown on drawing or in the engineers report;

- The layout and diameter of all pipes and position, type and spacing of sprinklers,
- Dripper spacing and hole diameter,
- Position of air admittance valves and flushing points, if required,
- Where flushing valve are to overflow to,
- The use of any sequencing valves (if needed) to provide equal distribution to multiple irrigation zones (these must be of equal size),
- Assurance that the nominated pump is sufficient to maintain equal pressure and distribution across the design,
- Confirm the type of pump required (in most cases this is likely to be the off the shelf model that comes with the aerobic tank system),
- And the usual requirements such as setback distances from buildings & boundaries.

## What if the engineer doesn't have the skills?

As mentioned above, it is perfectly fine for them to seek advice of others and sign off that the design is adequate for the soil type on that site.

## Information for Plumbers

See Council for a copy of a Fact Sheet produced by the Department of Health titled 'Information for plumbers: New Requirements regarding Onsite Wastewater Systems'.

## Additional Information

It is strongly recommended that a copy of the new code is downloaded from the link provided below for future reference to the new requirements.

<http://www.health.sa.gov.au/pehs/branches/wastewater/new-regulations-and-codes.htm>

In addition to the code, systems can be deigned to meet the requirements of the Australian/New Zealand Standards, On-site domestic wastewater management (AS/NZS 1547:2012). The code outlines how these two documents can be utilised for designing and installing on-site systems. AS/NZS 1547:2012 provides far more detail and is more prescriptive with the information needed to design and install systems.

## Excerpt from the On-site Wastewater Systems Code (April 2013)

Table 8-1: Site and soil report requirements

<p>The wastewater engineer must provide a site and soil suitability report to the relevant authority. The report must include, but not be limited to:</p> <ul style="list-style-type: none"><li>&gt; Details of the investigations carried out</li><li>&gt; Site plan clearly showing:<ul style="list-style-type: none"><li>&gt; Soil sampling locations</li><li>&gt; Allotment dimensions</li><li>&gt; Location and dimensions of the proposed land application system</li><li>&gt; Existing and proposed buildings and structures e.g. retaining walls</li><li>&gt; Details of earthworks proposed as part of the site development</li></ul></li><li>&gt; Type of proposed system to be installed</li><li>&gt; Information about the soil types encountered at the sampling locations in the area of the proposed land application system</li><li>&gt; Nominated effluent percolation rate (EPR), design loading rate (DLR) or design irrigation rate (DIR) as applicable<sup>1</sup></li><li>&gt; Design of the land application system including soil horizon at which the base of the land application system is to be founded</li><li>&gt; Assessment of site suitability for long term effluent disposal/reuse</li><li>&gt; A summary of site characteristics as described in section 8.2.2</li><li>&gt; Supporting information with respect to climate characteristics including rainfall and evaporation which may affect the performance of the wastewater system</li><li>&gt; Comments regarding features on adjoining allotments which may affect or be affected by the proposed wastewater system</li><li>&gt; Any required surface water diversion</li><li>&gt; Any limitations of the proposed system</li><li>&gt; Any other requirements of the relevant authority.</li></ul>
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Contact Details:

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OR

For further information and assistance with these new requirement you can also contact the Department of Health Wastewater Management Section on 8226 7100.