FACT SHEET 4

DESIGN & CONSTRUCTION OF DISPOSAL AREAS FOR **ON-SITE SEWAGE MANAGEMENT SYSTEMS**

PRIOR TO **COMMENCEMENT OF WORKS**

Approvals

Before the commencement of works on your On-site Sewage Management System (OSMS), you must first check with Council to see if a Section 68 approval is required as prescribed by the Local Government Act 1993. A Section 68 approval is generally required prior to installation, construction or alteration of a waste treatment device or human waste storage facility or drain connecting to any such device or facility.

City of Wagga Wagga

Choosing the right OSMS

There are many varieties of OSMS available. For further information on system types, please visit NSW Department of Health's website. Alternatively, you may wish to discuss specific system makes and models with your local plumber or Geotechnical Soil Consultant.

As well as choosing the right OSMS, the method of disposal, the size of the disposal area and the location of the disposal area are important factors which contribute to the effectiveness and longevity of an OSMS.

The type of system and the size and location of the disposal area suitable for a property may depend on a number of different factors such as soil type, slope of the land, evaporation, transpiration and number of bedrooms and occupants in the dwelling. As such, a suitably qualified Geotechnical Soil Consultant should be hired to determine any site limitations and carry out testing to provide the ideal location and disposal size for an OSMS. It is important to discuss with your Geotechnical Soil Consultant the type of system you would like and the area you would like to designate for your disposal area so they can determine if the property can suitably support this. A geotechnical soil report may be required to be included in your Section 68 application submitted to Council before assessment can be made, particularly with an application to install or alter an OSMS.

DESIGN AND CONSTRUCTION IN ACCORDANCE TO **AUSTRALIAN STANDARDS**

There are many varieties of disposal methods that may be suitable for a property however all methods must comply with the Australian New Zealand Standard for "On-site domestic wastewater management" and be supported by the findings of the geotechnical soil report. Only Aerated Wastewater Treatment Systems (AWTS) that are regularly serviced can discharge wastewater via surface irrigation.

Conventional Systems

The most common disposal method for conventional systems is via trench or evapotranspiration bed (bed). The total length required for adequate disposal specific to a property is determined by the Geotechnical Soil Consultant based on the testing undertaken. It is recommended that the lengths of the individual trenches or beds be limited to around 20m in length. Where the total length required exceeds 20m, the total trench or bed length is normally divided into equal lengths and a distribution box is installed to allow for even flow to each trench or bed.

For example, if a property required a total length of 60m of trench, three 20m long trenches should be installed with a distribution box designed and installed to allow for even flow of wastewater to all three trenches.

Important Construction Requirements

It is important that the construction of the trenches or beds complies with the geotechnical soil report and the Australian Standards. Failure to do so may result in the decreased life of the disposal area and cause your disposal area to fail. A failing disposal area is a potential source of water pollution and may present serious health risks, cause unpleasant odours and attract vermin and insects.

Ensure:

- Individual trench or bed lengths are limited to around 20m and are equal lengths and widths.
- The base of the trenches or beds are level
- There are inspection openings installed to facilitate the monitoring of wastewater level in each trench or bed.
- Surface water is diverted away from the disposal area.
- Distribution aggregate is carefully placed on the trench or bed, avoiding damage to the base and side walls. A less permeable soil is then placed on the trenches or beds.
- The top of the bed is to be grassed with suitable shrubs and plants, please see Fact Sheet 7 for further information.
- Vegetation is maintained to allow a balance of sunlight and plant uptake.
- The disposal area fenced from children, stock and vehicles.

AWTS

AWTS can be discharged via subsurface or surface irrigation. It should be noted that before an AWTS is discharged via surface irrigation, continuous disinfection methods and regular servicing are required to minimise any potential health risks that may be associated with surface irrigation.

Ensure:

- All irrigation areas are appropriately sized and designed to ensure wastewater disposal rates do not exceed the absorption capacity of the soil.
- The AWTS is regularly serviced.
- The irrigation area is maintained and planted with suitable plant species that are not for human consumption.
- The irrigation system complies with AS1547 and fittings comply with AS1477 and AS2698.2. Lines and sprinklers should be lilac in colour and sprinklers are not to produce aerosols or mist and evenly distribute the wastewater.
- No runoff, seepage or surface ponding occurs from the irrigation area.
- Surface sprinklers are regularly moved within the irrigation area to allow for the even distribution of wastewater.
- The disposal area fenced from children, stock and vehicles.
- There are warning signs displayed at the boundaries of the designated irrigation area stating that reclaimed effluent is in use, to avoid contact and do not drink.

FURTHER INFORMATION

For further information visit
www.wagga.nsw.gov.au/publichealth
or contact an Environmental Health Officer
on **1300 292 442**.