

# Septic Safe

Fact Sheet 10



# **Commercial On Site Sewage Management Systems** (OSMS) or Systems Greater than 10 EP -Guide for Consultants

# Application and Assessment Process and Requirements

#### 1. Conduct an appropriate desktop study.

Refer to soil maps, drinking water catchment maps, Rous Water OSMS, Byron Shire Council's On-Site Sewage & Wastewater Management Strategy, soil stability and climate data etc. Ensure these documents are referenced in the proposals

#### 2. Consider influent characteristics and volumes

Influent from commercial premises varies dramatically from domestic influent qualities that most Council models and Australian Standards 1547-2022 address. Influent characteristics may need to be sampled / understood and pre treatment may be required. Hydraulic load can vary between average and peak loads that must be addressed as part of the proposal

Reference: <u>NSW Water</u> & <u>NSW Water Liquid Trade</u> <u>Waste Guidelines</u>

# **3.** Determine the effluent quality needed for the development.

Effluent quality is to be based on several factors e.g. the intended end use of the effluent, if land application (surface or sub-surface) or recycled, site constraints, receiving environment, sensitive area (oyster aquaculture farming), drinking water catchment area, high groundwater table, soil types, slope, registered groundwater bore location, drinking water supply source, buffers from site constraints etc. State how you determined the level of effluent quality needed for the development and provide supporting information/ documentation (e.g. risk assessment method).

References: <u>NSW EPA Use of Effluent By Irrigation</u> Water NSW ,

# 4. Nominate the type of OSMS that can treat the maximum volume of wastewater generated and achieve the effluent quality required

Provide documentation to certify that the nominated OSMS can achieve the nominated effluent utilities and hydraulic load e.g. include any: NSW Public Heath, , manufactured components with standards and/or water marks, certification from a wastewater engineer. Also include reserve storage capacity within treatment devices, pump wells or storage vessels to accommodate failures and servicing requirements.

References: Interim NSW Guidelines for Management of Private Recycled Water Schemes



# 5. Conduct an appropriate site and soil assessment on the property

To be in accordance with AS/NZS1547:2012 On-Site Domestic Wastewater Management or other references mentioned in this document suitable equivalent technical document.



### 6. Calculate the effluent land application area required

Include hydraulic and nutrient balance model/ spread sheet / calculations and select the most limiting constraint for the size of area needed (i.e largest area).

### 7. Detail how the effluent is to be applied evenly to the land

Provide irrigation design including location of air and flush valves, pump calculations, pumping cycles, high level and failure alarms, location of reserve or expansion effluent irrigation areas..

#### 8. Provide a site plan

Indicating the location of all OSMS facilities and buffer distances from sensitive receptors and property boundaries

#### 9. Other supporting documentation

Include any photos, reports, previous approvals, technical documents that will support your application.



#### 10. Operation and maintenance management plan

Provide an OSMS treatment train process flow chart and nominate all critical points in the process that will need to be monitored.

Include details on what, where, whom, how and when monitoring will be conducted including labelling sample points.Pictorial and in multi language Warning signs may be necessary Reference: <u>Signs As Remote</u> <u>Supervision</u>:

Include education information that details how the OSMS system works, what to do, what not to do, training awareness programs. that includes responsibilities for the owners, staff and general public.

A maintenance plan is needed that will include information on trouble shooting, if something goes wrong with the OSMS system, and emergency procedures & contacts etc.

#### 11. OSMS servicing requirements

Detail how often the OSMS system will need to be serviced, including specific liquid trade waste / pre treatment requirements, provide a copy of the standard service report check list, state the qualifications of the service person and the time intervals to send service reports to council's Environment Health Services Team and Health Unit

#### 12. Report Format

The report must be provide with:

- tables of contents, figures, images, appendices, plans and references.
- A table summarizing document revisions.
- An executive summary stating peak and average hydraulic loads, compliance with relevant referenced guidelines, standards or models and if not stating other mitigating strategies proposed.

## **13.** Certification of the OSMS design, installation and commissioning stages

A suitably qualified person is to provide certification of the OSMS system at appropriate stages of the development, typically a council officer or a representative nominated by council

#### 14. Monitoring and auditing

After approval to install is granted and the system has been satisfactorily commissioned Council will issue an Approval to Operate that will prescribe monitoring and reporting requirements and target effluent qualities.

#### 15. Administration

A fee per Equivalent Tenement (ET) for assessing the application and per annum fro the OSMS service fee. The annual fee will be applied to the rates notice for the property. The fee will be determined by Council based on <u>Councils ET Policy</u>.

#### **Further Information**

Environment Health Services

# E2017/5411 Jan 2017

