



Guidance on applying for approval of installation of a commercial onsite wastewater system

This factsheet is designed to assist you to complete an Application to construct or install an apparatus for the treatment of sewage in accordance with the *Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974*.

When is an application required?

In areas where reticulated sewerage is not available, onsite disposal of wastewater is required. An application must be lodged every time you intend to construct and install an apparatus for on-site wastewater disposal.

All applications must be lodged to the Local Government Authority (LGA) in the first instance. If it is intended that the proposed apparatus will handle less than 540L/day of wastewater and the building to be serviced is a single dwelling the LGA will process your application.

If the wastewater volume generated is more than 540L/day and the building being serviced is not a single dwelling the LGA will assesses your application, prepare a local government report and forward the application to the Department of Health (DOH) for processing.

Can I construct or install a wastewater system before I get an approval?

No. It is an offence to commence construction or installation of any wastewater system without an approval from either the LGA or DOH.

Can I use a wastewater system before it is approved?

No. Before you can use any waste water apparatus, the LGA must inspect the system to ensure it is installed correctly. If the installation is satisfactory, the LGA will issue a "Permit to Use". It is an offence to use the system prior to receiving the "Permit to Use".

Will an approval to construct and install or Permit to Use be given if I have used the wastewater system?

No. There is no provision in the legislation to provide a retrospective approval. It is possible that you may be directed to stop using and remove the apparatus.



Overview of information required

General requirements

The following should be provided with all applications:

- Completed and signed application form submitted in hard copy or electronic format. The form can be downloaded from:
http://www.public.health.wa.gov.au/3/1428/2/apply_to_install_a_wastewater_system.pm
- Application fees:
 - LGA approval: \$113 local government fee and \$113 inspection fee should be paid to the Local Government for the district in which the apparatus will be installed;
 - DOH approval: additional \$35 fee may be paid to the Department of Health (Water Unit) by credit card (please check details of payment methods in the 'Payment Options' section of the application form);
- Technical information as required by the application form

Technical information

The information listed below is required to accompany an application for the installation of a commercial on-site wastewater system.

Nature of the project

Information on the proposed project:

- Type of the development;
- Description of staged development, if planned;
- Size of served facility;
- Intended use of the building and the intended use of rooms within the building; and
- Proposed installation and methods of disposal/reuse of the final effluent.

Site and Soil Assessment

It is strongly recommended that assistance of professionals be engaged to undertake a Site and Soil Assessment (e.g. persons tertiary qualified in soil sciences, hydrology, engineering or similar). The Site and Soil Assessment should be carried out in accordance with AS/NZS 1547: 2000 On-site domestic-wastewater management.

Plans and specifications

A detailed plan of the on-site wastewater system, site plan and a building plan must be submitted. All plans are to be drawn to a scale of not less than 1:200. An example of a good site plan is included at the end of this factsheet.



System plan

System drawings, dimensioned and accompanied by a listing of all components must be submitted and must show the intended layout of the system including:

- Typical siting of tanks, chambers and control panels, pipes, inlet and outlet arrangements, effluent application areas or discharge points and other relevant details.
- Capacities of all components.

Site plan and building plan

A site plan must clearly show:

- Location of all buildings or proposed buildings, water tanks, swimming pools, driveways, excavations, stormwater drains, water pipes, easement drains, streams and water courses;
- Details of any site modifications (e.g. benching, cutting and filling);
- Site boundaries and size of the lot (include dimensions in metres or millimetres);
- Key topographical features (e.g. creek line, drainage line, slope of the land, direction of flow of stormwater, flood plains);
- Distances from boundaries, watercourses, buildings to the existing and proposed on-site wastewater treatment and disposal systems; and
- Exact location of all fixtures and fittings.

Design details of the system

Design details of the wastewater system to be used, including details of the following:

- The type of system;
- The trade name, if any;
- The manufacturer's name; and
- The design capacity of the system.

NOTE: the proposed treatment and disposal systems must be approved by the DOH. The status of manufacturers and various products can be easily checked with Water Unit staff on +61 8 9388 4999, or at the public health website:

http://www.public.health.wa.gov.au/3/1429/2/approved_wastewater_systems.pm

Description of treatment process

Detailed description of the selected treatment process and major components of system equipment shall be submitted and accompanied with:

- Schematic flow diagram to indicate stages in treatment process;
- Details of pre-treatment system, when required (e.g. oil separator, grease trap); and
- Disinfection method, if required.



Flow and load of effluent

Details of the sewage generating development including:

- Maximum number of persons using the system/occupancy rate;
- Type of facility to be served and per capita daily wastewater flow rate;
- Total hydraulic load;
- Calculation of daily wastewater volume; and
- Composition of wastewater (e.g. blackwater, greywater, or any non-domestic characteristics).

Effluent quality

Quality of effluent, both before and after treatment, shall be demonstrated prior to land application or discharge in terms of the following characteristics:

- BOD
- Suspended Solids
- Free Residual Chlorine
- Faecal Coliforms
- PH
- Grease/Oil

Land application or reuse system

Treated wastewater can be reused or simply disposed, depending on the type of land application system that is used and the quality of effluent. The disposal of the wastewater can be through a soil absorption system (e.g. leach drains, soakwells) or through an irrigation system (e.g. subsurface, surface irrigation) which is located on a dedicated disposal area (not for beneficial use). Wastewater can also be reused with appropriate treatment to the required standards and some management controls for a wide range of beneficial uses including industrial uses (e.g. cooling, dust suppression) or non-industrial uses (e.g. irrigation of public open spaces and agriculture, toilet flushing). All recycled water schemes must be approved by the DOH prior to implementation so when reuse of wastewater is proposed, a separate application has to be submitted to the DOH. When the wastewater reuse, disposal or combination of both is proposed the following details of the land application area must be submitted:

- Type of land application system (e.g. surface, subsurface, evaporation pond or leach drains);
- Reason for selection and suitability of type of land application;
- Sizing of land application area; and
- Layout of land application area.



Signed maintenance agreement

A signed maintenance agreement between the owner and the service provider for on-going servicing, pump out, emergency repairs must be submitted. Regular maintenance of any systems must be detailed in the maintenance agreement including frequency of maintenance and methods. The property owner will be held responsible for the ongoing operation of the system and should make any tenant aware of their responsibilities. This requirement does not apply to conventional septic tank systems.

Certified engineering specification

Certified engineering specification of commercial wastewater treatment plants and treatment ponds must accompany applications where these are proposed.

Compliance with the Government Sewerage Policy

Compliance with the Government Sewerage Policy - Perth Metropolitan Region (GSP)/Draft Country Sewerage Policy (DCSP) is required. The policies can be downloaded from:

http://www.public.health.wa.gov.au/3/1430/2/subdivisions_and_town_planning_approvals.pm

Under the density development provisions of the GSP/DCSP, a commercial or industrial development that cannot be connected to deep sewer is restricted to a level of density based on wastewater volume generated and the size of the lot. This is known as 'Single Residential Equivalent' (SRE) and equates to 540L of wastewater output per day per 2000m² of lot size. Below is an example of the calculation:

Example: For a restaurant with total area of 32648m²

And a daily wastewater volume of 1500L

Single Residential Equivalent (SRE) of block = $32648\text{m}^2/2000\text{m}^2 = 16\text{SRE}$ (permitted)

Generated wastewater volume = $1500\text{L}/540\text{L} = 3\text{SRE}$ (using)

Therefore this proposal complies with the GSP/CSP,

As the wastewater volume generated does not exceed the total SRE of the block

Single Residential Equivalent (SRE) is $540\text{L}/2000\text{m}^2$

Incomplete applications

The DOH and LGA can only assess complete applications. If your application does not include all the necessary information and supporting plans it will be returned to you.

Weblinks

- Wastewater Reuse: http://www.public.health.wa.gov.au/2/643/2/recycled_water.pm



More information

Water Unit

Environmental Health Directorate

Department of Health

PO Box 8172

PERTH BUSINESS CENTRE WA 6849

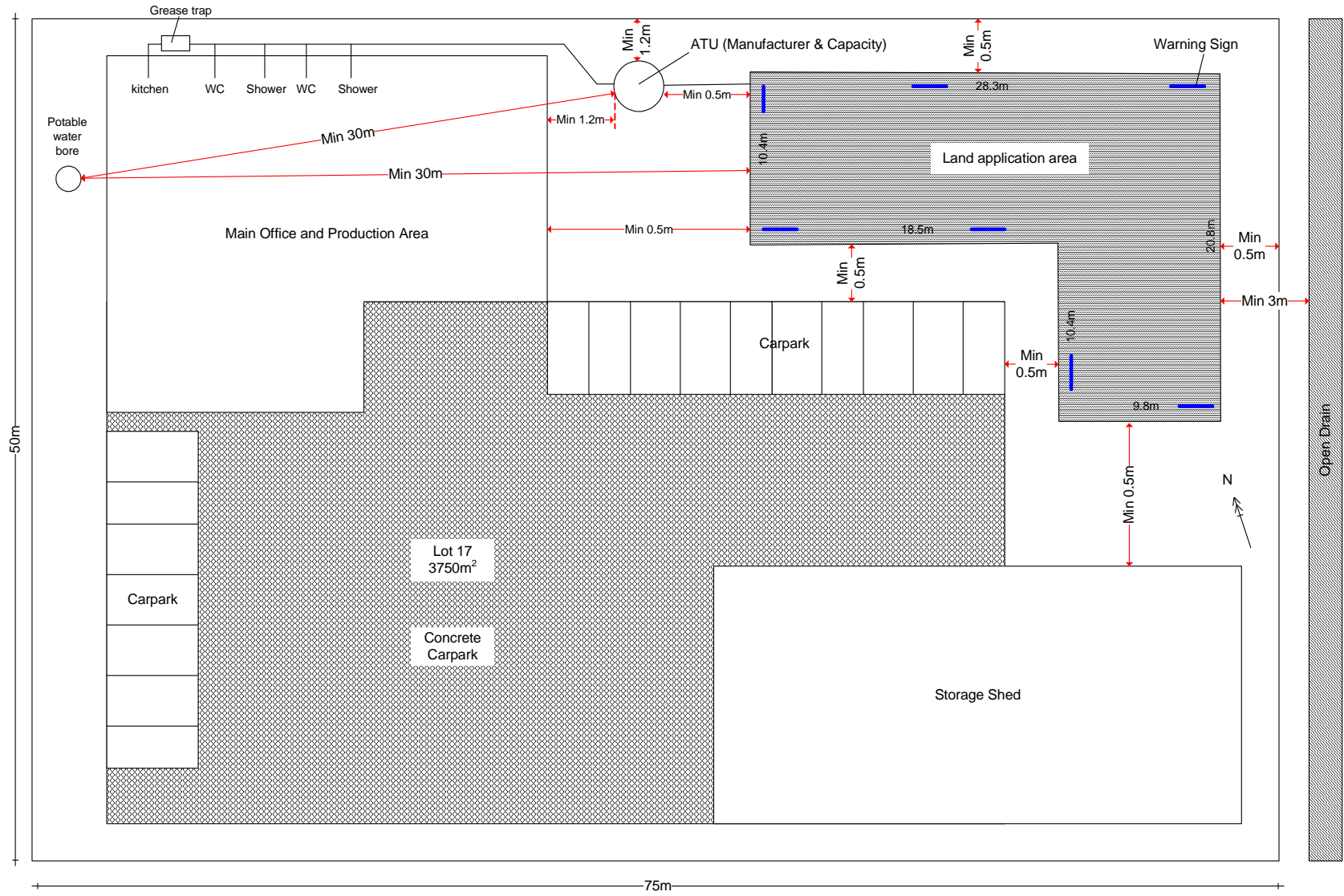
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Produced by Environmental Health Directorate
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Example of a good site plan



Wastewater System Layout Plan
 Lot 17, Street Street, SUBURB WA #####
 Drawing 1 of 2

Date: 22 June 2011
 Contact: 04##### ## #

Scale 1:200
 (when printed on A3)

