DTLR
TRANSPORT
LOCAL GOVERNMENT
REGIONS

The Building Regulations 2000

Drainage and waste disposal

H

APPROVED DOCUMENT

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Coming into effect 1 April 2002

The Stationery Office

2002 EDITION

The Requirement

WASTEWATER TREATMENT SYSTEMS AND CESSPOOLS THE REQUIREMENT H2

This Approved Document, which takes effect on 1 April 2002, deals with the following Requirement which is contained in the Building Regulations 2000 (as amended by SI 2001/3335).

Requirement	*Limits on application*

Wastewater treatment systems and cesspools

H2. (1) Any septic tank and its form of secondary treatment, other wastewater treatment system or cesspool, shall be so sited and constructed that -

(a) it is not prejudicial to the health of any person;

(b) it will not contaminate any watercourse, underground water or water supply;

(c) there are adequate means of access for emptying and maintenance; and

(d) where relevant, it will function to a sufficient standard for the protection of health in the event of a power failure.

(2) Any septic tank, holding tank which is part of a wastewater treatment system or cesspool shall be -

(a) of adequate capacity;

(b) so constructed that it is impermeable to liquids; and

(c) adequately ventilated.

(3) Where a foul water drainage system from a building discharges to a septic tank, wastewater treatment system or cesspool, a durable notice shall be affixed in a suitable place in the building containing information on any continuing maintenance required to avoid risks to health.

Guidance

Performance

In the Secretary of State's view the requirements of H2 will be met if:

a) wastewater treatment systems:

i) have sufficient capacity to enable breakdown and settlement of solid matter in the wastewater from the buildings;

ii) are sited and constructed so as to prevent overloading of the receiving water.

b) cesspools have sufficient capacity to store the foul water from the building until they are emptied;

c) wastewater treatment systems and cesspools are sited and constructed so as not to:

i) be prejudicial to health or a nuisance;

ii) adversely effect water sources or resources;

iii) pollute controlled waters;

iv) be in an area where there is a risk of flooding.

d) septic tanks and wastewater treatment systems and cesspools are constructed and sited so as to:

i) have adequate ventilation;

ii) prevent leakage of the contents and ingress of subsoil water.

e) having regard to water table levels at any time of the year and rising groundwater levels, drainage fields are sited and constructed so as to:

i) avoid overloading of the soakage capacity and

ii) provide adequately for the availability of an aerated layer in the soil at all times.

f) a notice giving information as to the nature and frequency of maintenance required for the cesspool or wastewater treatment system to continue to function satisfactorily is displayed within each of the buildings.

Introduction to provisions

0.1 A wastewater treatment system may be a septic tank, together with a drainage field or other means of secondary treatment, or other wastewater treatment system.

0.2 Paragraphs 1.1 to 1.72 give guidance only on the general principles relating to capacity, siting and ventilation of cesspools and wastewater treatment systems.

0.3 Any discharge from a wastewater treatment system is likely to require a consent from the Environment Agency.

Note: Initial contact with the Environment Agency is normally made as part of the planning procedures for non-mains drainage. Where there have not previously been such discussions with the Environment Agency, those seeking Building Regulations approval for non-mains drainage should contact the area office of the Environment Agency in order to determine whether a consent to discharge is required and what parameters apply. This should be done before an application is made for Building Regulations approval as it may have a direct bearing on the type of system that may be installed. Further information is available in the Environment Agency's Pollution Prevention Guideline No 4 *Disposal of sewage where no mains drainage is available.*

0.4 Specialist knowledge is advisable in the detailed design and installation of small sewage treatment works and guidance is given in BS 6297: 1983 *Code of practice for design and installation of small sewage treatment works and cesspools* (see also paragraph 1.72).

Options

1.1 The use of non-mains foul drainage, such as wastewater treatment systems or cesspools, should only be considered where connection to mains drainage is not practicable (see Approved Document H1).

1.2 Septic tanks provide suitable conditions for the settlement, storage and partial decomposition of solids which need to be removed at regular intervals. The discharge can, however, still be harmful and will require further treatment either from a drainage field/ mound or constructed wetland.

1.3 Septic tanks with some form of secondary treatment will normally be the most economic means of treating wastewater from small developments (e.g. 1 to 3 dwellings). Appropriate forms of secondary treatment for use with septic tanks (drainage fields, drainage mounds or constructed wetlands) are described in paragraphs 1.4 to 1.10 below.

1.4 Drainage fields typically consist of a system of sub-surface irrigation pipes which allow the effluent to percolate into the surrounding soil. Biological treatment takes place naturally in the aerated layers of soil.

1.5 Drainage fields may be used to provide secondary treatment in conjunction with septic tanks. They may be used where the subsoil is sufficiently free-draining and the site is not prone to flooding or waterlogging at any time of year.

1.6 The Environment Agency does not permit drainage fields or drainage mounds in prescribed Zone 1 groundwater source-protection zones.

1.7 Drainage mounds are essentially drainage fields placed above the natural surface of the ground providing an aerated layer of soil to treat the discharge.

1.8 Drainage mounds may be used where the subsoil is occasionally waterlogged, but where drainage fields would otherwise be suitable.

1.9 Constructed wetlands (for example reed beds) are man-made systems which exploit the natural treatment capacity of certain wetland plants.

1.10 Constructed wetlands discharging to a suitable watercourse may be used to treat septic tank effluent where drainage fields are not practical. The consent of the Environment Agency may be required.

1.11 Packaged treatment works – This term is applied to a range of systems engineered to treat a given hydraulic and organic load using prefabricated components which can be installed with minimal site work. They use a number of processes which are different in detail, all treat effluent to a higher standard than septic tank systems and this normally allows direct discharge to a watercourse.

1.12 Packaged treatment works discharging to a suitable watercourse will normally be more economic for larger developments than septic tanks. They should also be considered where space is limited or where other options are not possible.

1.13 Cesspools – A cesspool is a watertight tank, installed underground, for the storage of sewage. No treatment is involved.

1.14 Where no other option is feasible a cesspool may be acceptable.

Septic Tanks

1.15 Septic tanks should only be used in conjunction with a form of secondary treatment (e.g. a drainage field, drainage mound or constructed wetland).

Siting

1.16 Septic tanks should be sited at least 7m from any habitable parts of buildings, and preferably downslope.

1.17 Where they are to be emptied using a tanker, the septic tank should be sited within 30m of a vehicle access provided that the invert level of the septic tank is no more than 3m below the level of the vehicle access. This distance may need to be reduced where the depth to the invert of the tank is more than 3m. There should also be a clear route for the hose such that the tank can be emptied and cleaned without hazard to the building occupants and without the contents being taken through a dwelling or place of work.

Design and construction

1.18 Septic tanks should have a capacity below the level of the inlet of at least 2,700 litres ($2.7m^3$) for up to 4 users. The size should be increased by 180 litres for each additional user.

1.19 Factory made septic tanks are available in glass reinforced plastics, polyethylene or steel and should meet the requirements of BS EN12566-1. Particular care is necessary in ensuring stability of these tanks.

1.20 Septic tanks may also be constructed in brickwork or concrete, roofed with heavy concrete slabs. Brickwork should be of engineering bricks and be at least 220mm thick. The mortar should be a mix of 1: 3 cement sand ratio. In-situ concrete should be at least 150mm thick of C/25/P mix (see BS 5328).

1.21 Septic tanks should prevent leakage of the contents and ingress of subsoil water and should be ventilated. Ventilation should be kept away from buildings.

1.22 The inlet and outlet of a septic tank should be designed to prevent disturbance to the surface scum or settled sludge and should incorporate at least two chambers or compartments operating in series. Where the width of the tank does not exceed 1200mm the inlet should be via a dip pipe. To minimise turbulence, provision should be made to limit the flow rate of the incoming foul water. For steeply laid drains up to 150mm the velocity may be limited by laying the last 12m of the incoming drain at a gradient of 1 in 50 or flatter.

1.23 The inlet and outlet pipes of a septic tank should be provided with access for sampling and inspection (see Approved Document H1, Paragraph 2.48).

1.24 Septic tanks should be provided with access for emptying and cleaning. Access covers should be of durable quality having regard to the corrosive nature of the tank contents. The access should be lockable or otherwise engineered to prevent personnel entry.

Marking

1.25 A notice should be fixed within the building describing the necessary maintenance. An example of such wording is:

'The foul drainage system from this property discharges to a septic tank and a *<insert type of secondary treatment>*. The tank requires monthly inspections of the outlet chamber or distribution box to observe that the effluent is free-flowing and clear. The septic tank requires emptying at least once every 12 months by a licensed contractor. The *<insert type of secondary treatment>* should be *<insert details of maintenance of secondary treatment>*. The owner is legally responsible to ensure that the system does not cause pollution, a health hazard or a nuisance.'

Drainage Fields and Drainage Mounds

1.26 Paragraphs 1.27 to 1.44 give guidance on design and construction on drainage fields and drainage mounds to provide secondary treatment to the discharge from a septic tank or package treatment plant.

Siting

1.27 A drainage field or mound serving a wastewater treatment plant or septic tank should be located:

a) at least 10m from any watercourse or permeable drain;

b) at least 50m from the point of abstraction of any groundwater supply and not in any zone 1 groundwater protection zone;

c) at least 15m from any building ;

d) sufficiently far from any other drainage fields, drainage mounds or soakaways so that the overall soakage capacity of the ground is not exceeded.

1.28 The disposal area should be downslope of groundwater sources.

1.29 No water supply pipes or underground services other than those required by the disposal system itself should be located within the disposal area.

1.30 No access roads, driveways or paved areas should be located within the disposal area.

Ground conditions

1.31 Well drained and well aerated subsoils are usually brown, yellow or reddish in colour. Examples of subsoils with good percolation characteristics are sand, gravel, chalk, sandy loam and clay loam. It is important that the percolation characteristics are suitable in both summer and winter conditions. Poorly drained or saturated subsoils are often grey or blue in colour. Brown and grey mottling usually indicates periodic saturation. Examples of subsoils with poor percolation characteristics are sandy clay, silty clay and clay.

1.32 A preliminary assessment should be carried out including consultation with the Environment Agency and local authority to determine the suitability of the site. The natural vegetation on the site should also give an indication of its suitability for a drainage field.

1.33 A trial hole should be dug to determine the position of the standing ground water table. The trial hole should be a minimum of 1m² in area and 2m deep, or a minimum of 1.5m below the invert of the proposed drainage field pipework. The ground water table should not rise to within 1m of the invert level of the proposed effluent distribution pipes. If the test is carried out in summer, the likely winter groundwater levels should be considered. A percolation test should then be carried out to assess the further suitability of proposed area.

1.34 Percolation test method – A hole 300mm square should be excavated to a depth 300mm below the proposed invert level of the effluent distribution pipe. Where deep drains are necessary the hole should conform to this shape at the bottom, but may be enlarged above the 300mm level to enable safe excavation to be carried out. Where deep excavations are necessary a modified test procedure may be adopted using a 300mm earth auger. Bore the test hole vertically to the appropriate depth taking care to remove all loose debris.

1.35 Fill the 300mm square section of the hole to a depth of at least 300mm with water and allow it to seep away overnight.

1.36 Next day, refill the test section with water to a depth of at least 300mm and observe the time, in seconds, for the water to seep away from 75% full to 25% full level (i.e. a depth of 150mm). Divide this time by 150mm. The answer gives the average time in seconds (V_p) required for the water to drop 1mm.

1.37 The test should be carried out at least three times with at least two trial holes. The average figure from the tests should be taken. The test should not be carried out during abnormal weather conditions such as heavy rain, severe frost or drought.

1.38 Drainage field disposal should only be used when percolation tests indicate average values of Vp of between 12 and 100 and the preliminary site assessment report and trial hole tests have been favourable. This minimum value ensures that untreated effluent cannot percolate too rapidly into ground water. Where Vp is outside these limits effective treatment is unlikely to take place in a drainage field. However, provided that an alternative form of secondary treatment is provided to treat the effluent from the septic tanks, it may still be possible to discharge the treated effluent to a soakaway.

Design and construction

1.39 Drainage fields or mounds (see Diagrams 1 and 2) should be designed and constructed to ensure aerobic contact between the liquid effluent and the subsoil.

1.40 Drainage fields should be constructed using perforated pipe, laid in trenches of a uniform gradient which should be not steeper than 1/200.

1.41 Pipes should be laid on a 300mm layer of clean shingle or broken stone graded between 20mm and 50mm.

Diagram 1 **Drainage field**

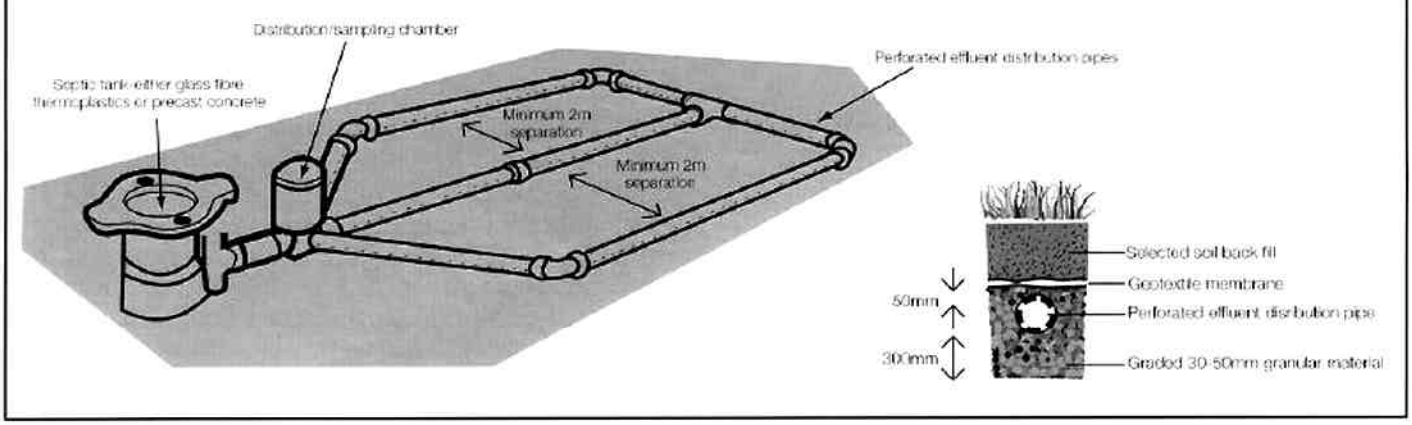
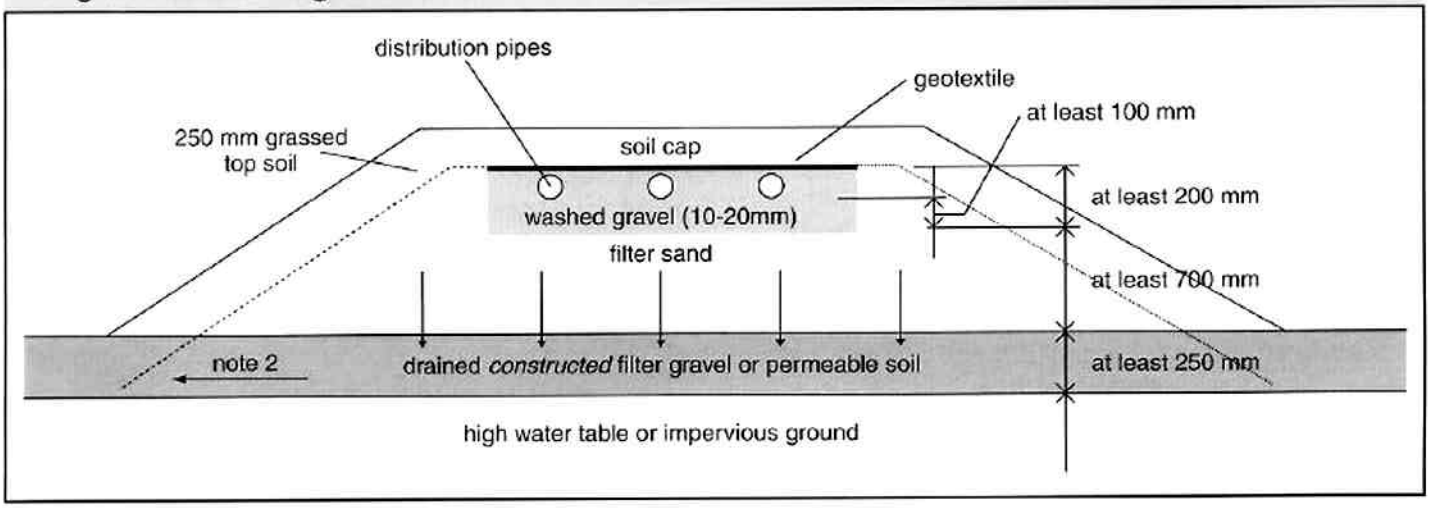


Diagram 2 **Drainage mound**



Notes:
1. To provide venting of the filter, the upstream ends of the distribution pipes may be extended vertically above mound level and capped with a cowl or grille.
2. Surface water run-off and uncontaminated seepage from the surrounding soil may be cut off by shallow interceptor drains and diverted away from the mound. There must be no seepage of wastewater to such an interceptor drain.
3. Where the permeable soil is slow draining and overlaid on an impervious layer, the mound filter system should be constructed on a gently sloping site.

1.42 Trenches should be filled to a level 50mm above the pipe and covered with a layer of geotextile to prevent the entry of silt. The remainder of the trench can be filled with soil; the distribution pipes should be laid at a minimum depth of 500mm below the surface.

Drainage trenches should be from 300mm to 900mm wide, with areas of undisturbed ground 2m wide being maintained between parallel trenches (see Diagram 1).

1.43 An inspection chamber should be installed between the septic tank and the drainage field.

1.44 Drainage fields should be set out as a continuous loop fed from the inspection chamber (see Diagram 1). To calculate the floor area of the drainage field (A_t in m^2), the following formula should be used:

$$A_t = p \times V_p \times 0.25$$

where p is the number of persons served by the tank, V_p is the percolation value (secs/mm) obtained as described in paragraphs 1.34–1.38.

Constructed wetlands/Reed beds

1.45 Reed bed treatment systems or other constructed wetland treatment systems can be used to provide secondary or tertiary treatment of effluent from septic tanks or packaged treatment works. The systems purify wastewater as it moves through the gravel bed around the rhizomes and roots, by removing organic matter (BOD), oxidising ammonia, reducing nitrate and removing a little phosphorous. The mechanisms are complex and involve bacterial oxidation, filtration, sedimentation and chemical precipitation.

1.46 Reed beds generally use the Common Reed (Phragmites australis); other types of plants used in constructed wetlands include the Reed Maces (Typha latifolia), the rush (Juncus effusus), the true Bulrush (Schoenoplectus lacustris) as well as members of the Sedge family (Carex) and the Yellow Flag (Iris pseudacorus).

1.47 Constructed wetlands should not be constructed in the shade of trees or buildings as this will result in poor or patchy growth. Although winter performance is generally similar with respect to removal of BOD and suspended solids, it tends to be poorer than summer for removal or ammonia due to lower temperatures. This should be taken into consideration during the design stage.

1.48 There are two main designs of constructed wetland system, horizontal flow and vertical flow.

1.49 Horizontal flow systems are continuously fed with wastewater from one end. The effluent flows horizontally through the gravel bed over the full width of the bed to the outlet end (see Diagram 3). Horizontal flow systems tend to be oxygen-limited and they therefore tend not to be able to completely treat concentrated effluents particularly those with high levels of ammonia. Horizontal flow systems require a level site. As they only use a single bed less maintenance is required than with vertical flow systems.

1.50 Vertical flow systems are an intermittently fed with wastewater from the top flooding the surface followed by a period of rest. For this reason two or more beds are normally provided so that they can be used in rotation. The flow is predominantly downward to an outlet at the bottom (see Diagram 4) and is collected by a drainage network at the base. They therefore require a fall of between

Diagram 3 **Typical horizontal flow reed bed treatment system**

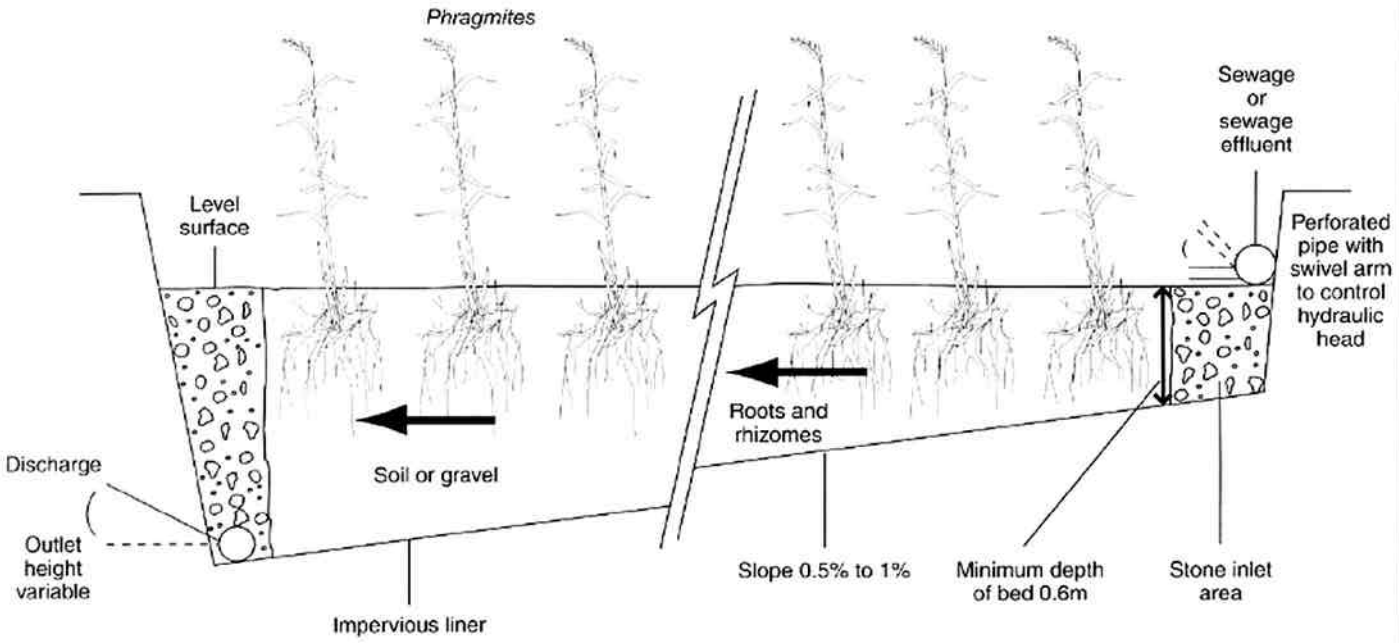
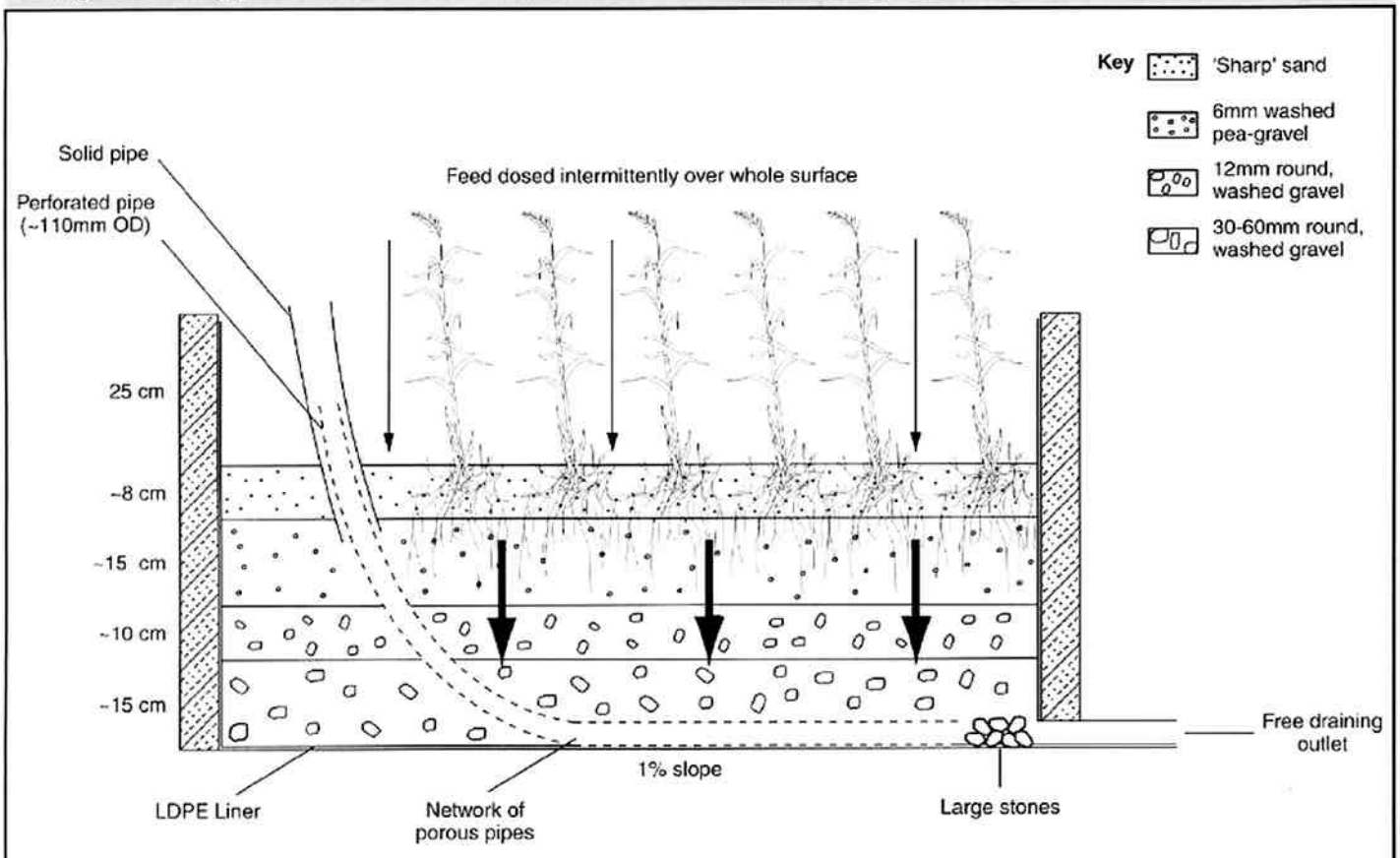


Diagram 4 **Typical vertical flow reed bed treatment system**



1m to 2m. Vertical flow systems can achieve much better oxygen transfer than horizontal flow systems and therefore achieve more complete treatment, particularly of ammonia. They generally require more maintenance than horizontal systems.

1.51 Reed bed treatment systems should be designed and constructed in accordance with BRE Good Building Guide No 42. Other forms of constructed wetland treatment system should be designed and constructed by specialists.

Marking

1.52 A notice should be fixed within the building describing the necessary maintenance. An example of such wording is:

'The foul drainage system from this building discharges to a *<insert type of primary treatment>* and a constructed wetland. The *<insert type of primary treatment>* requires *<insert details of maintenance of the primary treatment>*. The constructed wetland system requires *<insert details of maintenance of the constructed wetland>*.'

1.53 Guidance on maintenance requirements for reed bed treatment systems is given in BRE Good Building Guide No. 42.

Packaged treatment works

Siting

1.54 The discharge from the wastewater treatment plant should be sited at least 10m away from watercourses and any other buildings.

Design and construction

1.55 Packaged treatment works should be type-tested in accordance with BS 7781 or otherwise tested by a notified body.

1.56 If the packaged treatment works requires power to operate it should be able to adequately function without power for up to 6 hours or have an uninterruptable power supply.

Marking

1.57 A notice should be fixed within the building describing the necessary maintenance. An example of such wording is:

'The foul drainage system from this property discharges to a packaged treatment works. Maintenance is required *<insert frequency>* and should be carried out by the owner in accordance with the manufacturer's instructions. The owner is legally responsible to ensure that the system does not cause pollution, a health hazard or a nuisance.'

Cesspools

Siting

1.58 The site of the cesspool should preferably be on ground sloping away from and sited lower than any existing building in the immediate vicinity.

1.59 Cesspools should be sited at least 7m from any habitable parts of buildings and preferably downslope.

1.60 Cesspools should be sited within 30m of a vehicle access and at such levels that they can be emptied and cleaned without hazard to the building occupants or the contents being taker through a dwelling or place or work. Access may be through a covered space which may b lockable.

Design and construction

1.61 Cesspools should have a capacity below the level of the inlet of at least 18,000 litres ($18m^3$) for 2 users. This size should be increased by 6800 litres ($6.8m^3$) for each additional user.

1.62 Cesspools should have no openings except for the inlet, access for emptying and ventilation.

1.63 Cesspools should prevent leakage of the contents and ingress of subsoil water and should be ventilated.

1.64 Cesspools should be provided with acces for emptying and cleaning. Access covers should be of durable quality having regard to the corrosive nature of the tank contents. The access should be lockable or otherwise engineered to prevent personnel entry.

1.65 Factory made cesspools are available in glass reinforced plastics, polyethylene or steel and should meet the relevant requirements of BS EN 12566-1. Particular care is necessary in ensuring stability of these tanks.

1.66 Cesspools may be constructed in brickwork or concrete, roofed with heavy concrete slabs. Brickwork should be of engineering bricks and be at least 220mm thick. The mortar should be a mix of 1:3 cement sand ratio. In-situ concrete should be at least 150mm thick of C/25/P mix (see BS 5328).

1.67 The inlet of a cesspool should be provided with access for inspection (see Approved Document H1 Section 2).

Marking

1.68 A notice should be fixed within the building describing the necessary maintenance An example of such wording is:

'The foul drainage system from this property is served by a cesspool. The system should be emptied approximately every < insert design emptying frequency> by a licensed contractor and inspected fortnightly for overflow. The owner is legally responsible to ensure that the system does not cause pollution, a health hazard or a nuisance.'

Greywater and Rainwater storage tanks

1.69 Paragraphs 1.70 to 1.71 give guidance on tanks for the storage of greywater or rainwater for reuse within the building. It does not apply to water butts used for the storage of rainwater for garden use.

1.70 Greywater and rainwater tanks should:

a) prevent leakage of the contents and ingress of subsoil water, and should be ventilated.

b) have an anti-backflow device on any overflow connected to a drain or sewer to prevent contamination of the stored greywater or rainwater in the event of surcharge in the drain or sewer.

c) be provided with access for emptying and cleaning. Access covers should be of durable quality having regard to the corrosive nature of the tank contents. The access should be lockable or otherwise engineered to prevent personnel entry.

1.71 For further guidance on systems for greywater and rainwater reuse can be found in the Water Regulations Advisory Scheme leaflet No 09-02-04. *Reclaimed Water Systems. Information about installing, modifying or maintaining reclaimed water systems.*

Alternative Approach

1.72 The requirement can also be met by following the relevant recommendations of BS 6297:1983 *Code of practice for design and installations of small sewage treatment works and cesspools.* The relevant clauses are in Section one, Section two, Section three (clauses 6-11), Section four and Appendices.

Appendix H2-A

MAINTENANCE OF WASTEWATER TREATMENT SYSTEMS AND CESSPOOLS

Legislation

A.1 Local authorities have powers to ensure that wastewater treatment systems or cesspools are adequately maintained.

Power to examine and test

A.2 Under Section 48 (power of local authority to examine and test drains etc. believed to be defective)of the Public Health Act 1936 the local authority may test any cesspool, septic, tank or settlement tank where it appears to them that they have reasonable grounds for believing that is in such a condition as to be prejudicial to health or a nuisance.

Power in respect of overflowing or leaking cesspools, septic tanks etc.

A.3 Under Section 50 (overflowing and leaking cesspools) of the Public Health Act 1936 the local authority can take action against any person who has caused by their action, default or sufferance, a septic tank, settlement tank or cesspool to leak or overflow. They may require the person to carry out repairs or to periodically empty the tank.

A.4 This does not apply to the overflow of treated effluent or flow from a septic tank into a drainage field, provided the overflow is not prejudicial to health or a nuisance.

A.5 It should be noted that under this section action could be taken against a builder who had caused the problem, and not just against the owner.

Power to require repairs

A.6 Under Section 59 (drainage of building) of the Building Act 1984 the local authority may require the owner or occupier of a building to carry out remedial works where a septic tank, settlement tank or cesspool is:

a) insufficient;

b) in such a condition as to be prejudicial to health or a nuisance;

c) or is so defective that groundwater leaks into it.

Disused septic tanks, cesspools etc.

A.7 Also under Section 59 (drainage of building) of the Building Act 1984, where a disused cesspool, septic tank or settlement tank is prejudicial to health or a nuisance the local authority may require either the owner or the occupier to fill or remove the tank or otherwise render it innocuous.

Powers of the Environment Agency

A.8 The Environment Agency have powers under Section 85 (offences of polluting controlled waters) of the Water Resources Act 1991 to prosecute anyone causing or knowingly permitting pollution of any stream, river, lake etc. or any groundwater.

A.9 They also have powers under Section 161A (notices requiring persons to carry out anti-pollution works and operations) of the Water Resources Act 1991 (as amended by the Environment Act 1995) to take action against person causing or knowingly permitting a situation in which pollution of a stream, river, lake etc or groundwater, is likely. They can require such a person to carry out works to prevent the pollution.

Guidance on Maintenance

A.10 Paragraphs A.11 to A.22 give guidance on the appropriate maintenance of wastewater treatment systems and cesspools.

Septic tanks

A.11 Septic tanks should be inspected monthly to check they are working correctly. The effluent in the outlet from the tank should be free-flowing and clear. The flow in the inlet chamber should also be free-flowing.

A.12 If the flow is incorrect, the tank should be emptied by a licensed contractor. Some contractors offer annual maintenance contracts at reduced rates.

A.13 The septic tank should be emptied at least once a year. It is recommended that not all sludge is removed as it can act as an anaerobic seed.

A.14 If the tank is not adequately maintained and solids are carried into a drainage field/mound, the sediments can block the pores in the soil, necessitating the early replacement of the drainage field/mound. Occasionally, it can render the site unsuitable for future use as drainage field/mound.

Drainage fields and mounds

A.15 The drainage field/mound should be checked on a monthly basis to ensure that it is not waterlogged and that the effluent is not backing up towards the septic tank.

Packaged treatment works

A.16 The outlet of the works should be inspected regularly. The effluent should be free-flowing and clear.

A.17 Maintenance will vary depending on the type of plant; regular maintenance and inspection should be carried out in accordance with the manufacturers instructions.

A.18 Where the treatment works serves more than one property, the developer may seek to get it adopted by the Sewerage Undertaker under Section 102 (Adoption of sewers and disposal works) or Section 104 (Agreements to adopt a sewer or disposal works at a future date) of the Water Industry Act 1991 (see Approved Document H1 Appendix H1–B).

Constructed wetlands/reed beds

A.19 Guidance on maintenance of reed beds can be found in BRE Good Building Guide No 42.

Cesspools

A.20 Cesspools should be inspected fortnightly for overflow and emptied as required.

A.21 Typically they require emptying on a monthly basis by a licensed contractor.

A.22 Emptying frequencies may be estimated by assuming a filling rate of 150 litres per person per day. If the cesspool does not fill within the estimated period, the tank should be checked for leakage.

Appendix H2-A

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Legislation

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A.3 Under Section 50 (overflowing and leaking cesspools) of the Public Health Act 1936 the local authority can take action against any person who has caused by their action, default or sufferance, a septic tank, settlement tank or cesspool to leak or overflow. They may require the person to carry out repairs or to periodically empty the tank.

A.4 This does not apply to the overflow of treated effluent or flow from a septic tank into a drainage field, provided the overflow is not prejudicial to health or a nuisance.

A.5 It should be noted that under this section action could be taken against a builder who had caused the problem, and not just against the owner.

Power to require repairs

A.6 Under Section 59 (drainage of building) of the Building Act 1984 the local authority may require the owner or occupier of a building to carry out remedial works where a septic tank, settlement tank or cesspool is:

a) insufficient;

b) in such a condition as to be prejudicial to health or a nuisance;

c) or is so defective that groundwater leaks into it.

Disused septic tanks, cesspools etc.

A.7 Also under Section 59 (drainage of building) of the Building Act 1984, where a disused cesspool, septic tank or settlement tank is prejudicial to health or a nuisance the local authority may require either the owner or the occupier to fill or remove the tank or otherwise render it innocuous.

Powers of the Environment Agency

A.8 The Environment Agency have powers under Section 85 (offences of polluting controlled waters) of the Water Resources Act 1991 to prosecute anyone causing or knowingly permitting pollution of any stream, river, lake etc. or any groundwater.

A.9 They also have powers under Section 161A (notices requiring persons to carry out anti-pollution works and operations) of the Water Resources Act 1991 (as amended by the Environment Act 1995) to take action against person causing or knowingly permitting a situation in which pollution of a stream, river, lake etc or groundwater, is likely. They can require such a person to carry out works to prevent the pollution.

Guidance on Maintenance

A.10 Paragraphs A.11 to A.22 give guidance on the appropriate maintenance of wastewater treatment systems and cesspools.

Septic tanks

A.11 Septic tanks should be inspected monthly to check they are working correctly. The effluent in the outlet from the tank should be free-flowing and clear. The flow in the inlet chamber should also be free-flowing.

A.12 If the flow is incorrect, the tank should be emptied by a licensed contractor. Some contractors offer annual maintenance contracts at reduced rates.

A.13 The septic tank should be emptied at least once a year. It is recommended that not all sludge is removed as it can act as an anaerobic seed.

A.14 If the tank is not adequately maintained and solids are carried into a drainage field/mound, the sediments can block the pores in the soil, necessitating the early replacement of the drainage field/mound. Occasionally, it can render the site unsuitable for future use as drainage field/mound.

Drainage fields and mounds

A.15 The drainage field/mound should be checked on a monthly basis to ensure that it is not waterlogged and that the effluent is not backing up towards the septic tank.