

Non Mains Drainage Supporting Information

Policy Driver: Department of the Environment, Transport & the Regions (DETR) Circular 03/99 – Planning Requirement in respect of the use of Non mains Sewerage incorporating Septic Tanks in New Development

The responsibility for demonstrating that a new development is effectively served by a sewerage system rests primarily with the developer. Before deciding a planning application, the Local Planning Authority needs to be satisfied that the sewerage arrangements are suitable. **If the non-mains sewerage and sewage disposal proposals are assessed as being unsatisfactory, this would normally be sufficient to justify refusal of planning permission.**

When assessing sewerage proposals for any development, the first presumption is to provide a system of foul drainage discharging into a public sewer. This should be done in consultation with Yorkshire Water.

If connection to a public sewer is not feasible, a package sewage treatment plant incorporating a combination of treatment processes should be considered.

Only if it can be clearly demonstrated by the applicant that the sewerage and sewage disposal methods referred to above are not feasible, taking into account cost and/or practicability, should a system incorporating septic tank(s) be considered and proposed if appropriate.

The Environment Agency has designed a form and letter (see below) which should be submitted with all planning applications where a new non mains drainage system is involved. The form also should be submitted for planning applications involving increase use of an existing non mains drainage system by more than 25%, calculated on no. of bedrooms for domestic properties and by floor space where applicable.

In addition to the Environment Agency form assessment/action for the following matters are required before consultation and publicity can be carried out on planning applications:

Proposed Treatment Plants – A percolation test must be carried out and the results submitted with the application unless the Treatment Plant is to be draining into a watercourse.

Proposed Septic Tanks – The **Impact Assessment** (see below) needs to be submitted before the application can be registered.

If your application proposes use of a new septic tank(s) it should be supported by a full impact assessment (five copies), to confirm that the adverse effects by reference to the factors (a) to (k) below will not arise. This assessment should focus on the likely effects on the environment, amenity and public health and, in particular, it should include a thorough examination of the impact of disposal of the final effluent, whether it is discharged to a water course or disposed of by soakage into the ground.

The same assessment is required when a cesspool is proposed.

The assessment of non-mains drainage proposals should include full and detailed consideration of the following factors:

- a) **Contravention of recognised practices:** Any evidence which shows that the proposed arrangements are likely to prejudice, contravene or breach any statute, Regulation, Directive, Code of Practice, Byelaw, water quality objective or any other authoritative standard (such as British Standards, the Environment Agency's Policy and Practice for the Protection of Groundwater (republished 1998), research papers/reports with proven conclusions).
- b) **Adverse effect on water sources/resources:** Any information produced by the British Geological Survey, the Environment Agency (including its predecessor bodies) or any other authoritative sources, which shows that the area has geological formations which could allow the transmission by percolation or by surface run-off of sewage effluent from the proposed foul drainage system, directly or indirectly, so as to adversely affect any existing or potential surface or groundwater sources used or likely to be used for public or private water supplies or for animal husbandry or agriculture or recreation or the interests of other riparian owners.
- c) **Health hazard or nuisance:** Any evidence which indicates that the proposed arrangements and the associated effluent disposal system is likely to lead to a risk to public health or cause a nuisance.
- d) **Damage to controlled waters:** Any evidence including reference to information on site hydrology and geology and to Groundwater Regulations, which indicates that the proposed arrangements may result in the entry of any poisonous, noxious or polluting matter or any solid waste matter into any controlled waters, including ground waters, to the detriment of water quality.
- e) **Damage to the environment and amenity:** Any evidence that the proposed arrangements are likely to lead to raw or partially treated sewage entering into receiving waters or onto land, to such an extent as to damage or undermine the environment and amenity value of the locality or any other area, particularly if it is of special significance such as a Site of Special Scientific Interest (SSSI), Area of Outstanding Natural Beauty (AONB) or public open space.
- f) **Overloading the existing capacity of the area:** Any authoritative assessment or available records, which indicate that i) the addition of new discharges from a proposed development to those which already exist in the area, or ii) the quality or quantity of new discharges by themselves, are likely to overload the local subsoil soakage capacity or receiving water to the extent that it may lead to problems of ponding, sewage flooding, pollution or nuisance.
- g) **Absence of suitable outlets:** Any evidence to show that there is no suitable facility such as satisfactory water courses or adequate land for soakage in the locality to accommodate the disposal of effluent from the proposed septic tanks serving the new development.
- h) **Unsuitable soakage characteristics:** Any results derived from percolation tests which have been carried out in accordance with BS 6297 or a subsequent superseding standard, (preferably carried out in winter conditions when the soils are saturated), which show that the local soil conditions would preclude effective disposal of any sewage effluent from the proposed septic tanks serving the new development.
- i) **High water table:** Any evidence drawn from the records of 'rest water levels' observed in trial holes which show that the water table in the locality is so high

that at any time of the year it could inhibit or impede or adversely affect the proposed foul drainage/effluent disposal arrangements.

- j) **Rising ground water levels:** Any evidence, such as water table records of the locality, which show that the levels have been rising consistently and are likely to interfere with the proposed foul drainage/effluent disposal system, or may cause damage to other land or property in the area eg by its contribution to landsliding or subsidence.*

- k) **Flooding:** Any evidence, such as records of frequencies and levels of previous flood incidents, which show that the locality is subject to flooding to the extent that the proposed non-mains sewerage would lead or contribute to environmental or amenity problems.*

Before the assessment is carried out you are advised to have informal discussions with:

- ❖ The Borough Council's Department of Community Services – 01423 556633
- ❖ The Environment Agency – 08708 506506
- ❖ Yorkshire Water – 0845 1242429

GUIDANCE ON CARRYING OUT A PERCOLATION TEST

Avoid carrying out this test in extreme weather conditions such as drought, frost and heavy rain

1. Excavate three holes 300mm square to a depth of 250mm below the proposed invert level (bottom of the pipe) of the land drain and space them evenly along the proposed line of the subsurface irrigation system.
2. Fill each hole with water and allow to seep away overnight.
3. Next day, refill each hole with water to a depth of no more than 300mm and observe the time in seconds for the water to seep away completely.
4. Divide each figure by the depth of water in millimetres placed in the hole. The answer gives the time required (in seconds) for the water to drop 1mm. This is the percolation value (in seconds).
5. The average figure for the percolation value (V) is obtained by summing all three values and dividing by three.
6. If the percolation value exceeds 100sec/mm, then ground conditions may be unsuitable for discharge from a septic tank/package plant system and an alternative means of disposal will have to be considered to avoid ponding of foul effluent on the surface due to inefficient soakage.
7. For domestic premises, the floor area of soakaway land drains (A in square metres) required may be calculated from: $A = P \times V \times 0.25$ where P= number of persons served by the tank and V = the percolation value described above.

If in doubt, consult your professional adviser or Local Authority building control officer for advice.

Notes: The percolation test should be conducted in accordance with BS 6297 : 1983 as set out above. It should be noted that whilst the Environment Agency can advise on the likely suitability of a soakaway on the basis of percolation test data presented to it, the responsibility for ensuring that a soakaway functions satisfactorily lies with the applicant and the Local Planning Authority