Advice for local authorities on non-mains drainage from non-major development

Purpose of the guidance

In April 2015 the Development Management Procedure Order (DMPO) Schedule 4 was changed so the Environment Agency is no longer a statutory consultee for non-major development proposing non-mains drainage. This change means it is the local planning authority's (LPA's) responsibility to ensure proposals for non-mains drainage for non-major development complies with the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) without Environment Agency advice. This advice has been provided to help LPAs do this and it is the LPAs choice if they want to use this guidance. This advice can also be used by LPAs for major developments where the Environment Agency locally no longer provides bespoke comments.

Who will benefit from this guidance?

This guidance is principally to help LPAs determine planning applications proposing to rely on non-mains foul drainage systems. This guidance will be most useful in those areas with high levels of growth and environmentally sensitive receptors such as environmental designations for water bodies (e.g. Special Areas of Conservation). This combination of circumstances is likely to mean that there will be a relatively high number of non-mains drainage proposals that could affect sensitive environmental receptors in the water environment.

Planning decision making and foul drainage

To comply with the NPPF and PPG on foul drainage matters an LPA needs to be satisfied that foul drainage can be provided without adverse impact on the environment. This requires ensuring that both those environmental risks outside of the control of the permit and the relevant considerations in the PPG are addressed. The LPA should also be mindful that the developer will need to address foul drainage matters to get their environmental permit and meet building control regulations. Therefore, they should be confident that it is likely that any necessary permits and approvals can be successfully obtained.

Feedback

We welcome feedback on this document. Please send it to Caroline Sutton.

Any queries related to site specific permitting issues should be sent to the Environment Agency National Customer Contact Centre (enquiries@environment-agency.gov.uk).
1. **Introduction**

The inappropriate use of non-mains foul drainage can pose a serious risk to the environment and to public health.

This guidance should be used in conjunction with:

- The Environment Agency’s [non-mains foul drainage assessment form (FDA1)](https://www.gov.uk/environment) (or equivalent);
- The [general binding rules](https://www.gov.uk/environment) for small sewage discharges (including criteria for sites where discharges will require an environmental permit); and
- Maps showing the location and extent of Source Protection Zone 1’s (SPZ1) and other groundwater constraint areas\(^1\). A permit is required for any discharge to ground in an SPZ1 and this may not be granted.

The flowcharts indicate cases:

- Where non-mains foul drainage as proposed may lead to environmental harm and therefore be contrary to national planning policy.
- Where insufficient information has been supplied to allow an informed judgement to be made on the proposal and the Planning Officer should consider the need for further assessment by the applicant.

2. **Audience for the standard advice**

We have produced this advice to assist LPA Planning Officers in responding to pre-application enquiries and making decisions on planning applications without consulting the Environment Agency. It will also be relevant to developers and members of the public to help them choose suitable sewage disposal options and reduce the likelihood of their applications being refused.

If you choose to use this guidance we recommend you share it with your Building Control team and Approved Building Inspectors, if you use them.

3. **Key messages**

Addressing relevant issues at the pre-application stage has long been recognised as good practice and this advice will help aid pre-application discussion. Such discussions may be used to increase applicants’ awareness of foul drainage considerations, such as the need to:

- Check whether the discharge meets the [general binding rules](https://www.gov.uk/environment) specified by the Environment Agency or if an [environmental permit](https://www.gov.uk/environment) (EP) is required - see Section 4 below.
- Allow sufficient space if a non-mains foul discharge will be made to ground. This should be factored into the layout of the development at an early stage.
- The requirement to have a package treatment plant if a discharge will be made to surface water.
- Connect to the public sewerage network wherever it is reasonable to do so.

Paragraph 020 of the [PPG](https://www.gov.uk/environment) on water supply, wastewater and water quality indicates that any planning application that proposes non-mains foul drainage should be accompanied by sufficient information to understand the potential implications for the water environment. A completed FDA1 form, or equivalent information, should accompany all planning applications where use of a non-

\(^1\) Groundwater constraint areas are areas currently designated by the Environment Agency as Source Protection Zone 1 in addition to other areas which have been identified by Environment Agency Area Offices as being of specific local concern with regard to future discharge of effluent to ground.
mains system is proposed for foul drainage in order to enable the Planning Officer to make a considered judgement on the environmental risks associated with the application. In some cases further assessment may be required.

Where an environmental permit will be required this should be parallel tracked with the related planning application. Parallel tracking will help avoid situations where the proposed layout of the development conflicts with permit conditions, for example the amount of space required to site a pumping station to pump effluent to the public sewer or construct a shallow infiltration system.

4. Policy framework

The NPPF (paragraphs 170 and 180) stresses the need for LPAs to take into account the effects of pollution on health and the environment and to ensure that development is appropriate for its location. The Government’s planning advice on the use of non-mains foul drainage in England is contained within the PPG. The principles set out in the PPG are expanded upon in Building Regulations Approved Document H.

The operation of small sewage discharges such as those from septic tanks or package treatment plants is regulated under the Environmental Permitting Regulations 2016 (EPR). Under EPR, operators of such plants need to follow a number of conditions, known as general binding rules, to ensure their systems are legal and not causing pollution, or apply for a permit if they will be discharging in a sensitive area. More information is available at www.gov.uk/small-sewage-rules

5. Foul drainage assessments

5.1 Connection to the public foul sewer

Private non-mains foul drainage systems are not considered to be environmentally acceptable within publicly sewered areas. Both the PPG and the Building Regulations 2010 (Approved Document H) set out a presumption in favour of connection to the public foul sewer wherever it is reasonable to do so. This is also a requirement of the general binding rules for small sewage discharges and is reiterated by the Environment Agency in GP3 - Position Statement G5 “Connection to public foul sewer”.

Before a proposal to use non-mains foul drainage is considered in detail an applicant must therefore show to the Planning Officer’s satisfaction that it is not reasonable to connect to the public sewer. Connection to the sewer may be reasonable where it is more costly than the installation of a private foul sewerage system because of the benefits of connection to the mains foul sewer.

The Planning Officer must be satisfied that the applicant has identified the closest potential point of connection to the existing public foul sewerage network. Where appropriate this may be checked using the statutory maps maintained by sewerage undertakers, along with local knowledge.

As a rule of thumb, connection to the public foul sewer should be considered to be potentially feasible where the distance from the development site to the sewer is less than the number of properties multiplied by 30m, as explained the guidance on the general binding rules.

The potential environmental impact of discharges from proposed private sewerage systems and the question of whether it is reasonable for a development to connect to the public foul sewer should be considered on the basis of the cumulative volume of effluent from all foul drainage systems serving the overall development, rather than the volume of individual discharges from any separate foul drainage systems serving that development.
For discharges proposed to go to the mains foul sewer the Planning Officer should be confident that this is a feasible option and that any mitigating measures necessary to enable a connection to be made have been identified and agreed between the applicant and the sewerage undertaker. If it emerges that it is not feasible to connect to the public foul sewer the Environment Agency may not be able to permit a discharge to surface water or ground.

Problems with the public sewer being at capacity, or other operating problems with the public sewer are not acceptable reasons for non-connection where this is reasonable in other respects. Where there is a lack of capacity within the public sewerage system applicants should establish with the sewerage undertaker how they can connect their development to the existing network without exacerbating any existing problems. If it emerges that an agreement cannot be reached to allow use of the mains foul sewer then the developer and LPA should be aware that the Environment Agency may not be able to grant a permit for a discharge to surface water or groundwater at a later stage. The PPG explains that in such circumstances the scope for phasing development in line with provision of any necessary additional capacity should be explored.

5.2 Choice of non-mains sewerage option

Where a connection to public sewer is not reasonable, the PPG and Building Regulations Approved Document H set out the following hierarchy of non-mains alternative solutions.

- Package sewage treatment plants (which may be offered to the sewerage undertaker for adoption),
- Septic tanks; and
- Cesspools (if no other solution is possible).

From the Environment Agency’s perspective when a discharge cannot be made to the public foul sewer, the sensitivity of the receiving environment (surface water or groundwater) will be key to whether a potential discharge will be acceptable.

5.2.1 Discharges to ground

For any discharge to ground from a package treatment plant or septic tank the first assumption should be that the discharge will be made to a shallow infiltration system designed and installed in line with BS6297:2007 + A1:2008 and any subsequent amendments to that standard. This is a requirement of the general binding rules for small sewage discharges. Very similar requirements for the design and installation of shallow drainage fields are set out in Building Regulations Approved Document H2. Part 2A of the sequence of flowcharts below may be used to highlight cases where the requirements for the drainage field in the BS6297:2007 and Building Regulations Approved Document H2 may not be met.

Drainage fields are an important component of a non-mains wastewater treatment system, as they use the biologically active soil beneath the system to provide additional treatment of the effluent in the ground before it enters groundwater. Designs used for surface water soakaways (including the use of soakaway crates) are not appropriate for foul effluent drainage.

Deep infiltration systems (boreholes, wells, concrete ring structures) for discharges to ground pose a higher risk of groundwater pollution by concentrating the discharge in one small area and bypassing the soil layers and are not in line with BS6297:2007. These systems are not appropriate as an alternative to a shallow infiltration system where the only reason for their use is to maximise the proportion of available land that can be built on. All such discharges require an environmental permit and will not be permitted unless the full requirements of GP3, in particular Position Statement G9 - “Use of deep infiltration systems for surface water and effluent disposal”, can be met. In cases where a deep infiltration system is proposed we strongly recommend pre-application discussions with the Environment Agency and twin-tracking of applications for planning permission and any associated environmental permit.
5.2.2 Discharges to surface water
Any discharge to a watercourse must be via a package treatment plant and not a septic tank. The Environment Agency will not grant a permit for a new discharge to a watercourse from a septic tank in anything other than exceptional circumstances. Further details are available in the guidance on the general binding rules.

Measures that are necessary in order for a non-mains sewerage system to be acceptable, relating for example to siting, design, maintenance or emptying, may be specified in a submitted foul drainage assessment by an applicant or elsewhere in the course of a planning application. Where that is the case, the LPA should ensure that the conditions it attaches to any planning permission it grants are sufficient to ensure that the relevant measures are implemented.

5.2.3 Cesspools
A cesspool is a watertight tank used for receiving and storing sewage and has no outlet. It relies on road transport for the removal of raw sewage and is therefore the least sustainable option for sewage disposal. It is essential that a cesspool is, and remains, properly sealed in order to prevent the ingress of groundwater or surface water.

Because these are sealed systems which do not discharge to the environment there is usually no requirement to hold a permit for these systems.

6. Other considerations

6.1 Twin tracking
To gather evidence to deal with these more complex cases, it may be helpful for the LPA to understand the Environment Agency's perspective on the environmental permit for the development. In order to get this, they can recommend the developer starts discussion with the Environment Agency regarding the environmental permit, twin tracking the planning and permitting applications. This guidance identifies scenarios where twin tracking could be helpful, however, it is a developer’s choice if they want to do this. If they do not, then the LPA needs to decide if they have enough evidence to be confident the development complies with NPPF and PPG, and grant or refuse the application on this basis. It is important to note that the number of instances where non-major development proposing non-mains drainage will need twin tracking to support the LPAs decision will be very small.

6.2 Planning conditions
In some cases the risks to the environment outside of the environmental permit could be addressed though planning conditions, such as conditions requiring verifiable records and checks on construction and subsequent operation. This guidance also helps LPAs identify such scenarios. However, it is up to the LPA to specify appropriate conditions and be confident that these conditions relate to planning and not the environmental permit.
Part 1 - Overview of suggested process:

START: APPLICATION RECEIVED BY LPA

Has the applicant submitted a completed Foul Drainage Assessment (FDA)?

Does the proposed development constitute major development?

Assess without consulting the Environment Agency.

Is the proposed development in a location where it may be reasonable to connect to a sewer, taking account of the size of the development proposed and the characteristics of the local environment? (Refer to FDA, maps available from local sewage undertaker, OS maps, Building Control, local knowledge).

Has the applicant provided adequate justification for non-connection to mains foul sewer?

What type of non-mains system is proposed?

- Package treatment plant or septic tank
  - See part 2
- Cesspool
  - See part 3

ENVIRONMENTAL PERMIT REQUIRED

Recommend twin tracking of permit and planning applications. The LPA will lead on planning issues and the Environment Agency permitting team (03708 506506 or enquiries@environment-agency.gov.uk) will lead on permitting issues. See 'Planning and Permitting Guidance'.

CONSULT ENVIRONMENT AGENCY WITH THE FDA

NON-MAINS PROPOSAL MAY BE UNSUITABLE – consider whether to:
- Require the applicant to provide satisfactory justification to the LPA to demonstrate that connection to a sewer is either practically infeasible, or not reasonable due to disproportionate cost; or
- Refuse the application in line with national planning policy
Part 2 - Package treatment plant or septic tank

Is the site within an area where the Environment Agency locally has indicated to the planning authority that specific safeguards are necessary for discharges to ground or surface waters?

- YES
  - Is the proposal consistent with the relevant safeguards and does it provide for any necessary mitigation?
    - YES
      - Assess appropriateness of foul drainage discharging to ground as proposed using flowchart part 2A below.
    - NO
      - Does flowchart part 2A indicate that non-mains foul drainage as proposed may not be appropriate or that permit and planning applications should be twin-tracked?

- NO
  - Does the non-mains system involve a discharge solely to watercourse? (FDA1, Q2)
    - N.B. the Environment Agency is highly unlikely to grant a permit to discharge effluent from a septic tank to a watercourse.

- YES
  - Does flowchart part 2A indicate that non-mains foul drainage as proposed may not be appropriate or that permit and planning applications should be twin-tracked?

- NO
  - Does the non-mains system as proposed meet the requirements of the *General Binding Rules for small sewage discharges*? (FDA1, Q11)
    - YES
      - Include any necessary conditions in any permission and ensure that any necessary legal agreement is in place to cover issues of siting, design and maintenance.
    - NO
      - Ask for further information OR secure maintenance through condition and legal agreement.

- NO
  - Has the applicant provided details of how they propose to maintain the system? (FDA, Q12)
    - YES
      - Look for any necessary conditions in any permission and ensure that any necessary legal agreement is in place to cover issues of siting, design and maintenance.
    - NO
      - Does the non-mains system as proposed meet the requirements of the *General Binding Rules for small sewage discharges*? (FDA1, Q11)

NON-MAINS PROPOSAL MAY BE UNSUITABLE – consider whether to:

- YES
  - Reuse the application in line with national planning policy.

- NO
  - ENVIRONMENTAL PERMIT REQUIRED
    - Recommend twin-tracking of permit and planning applications. The LPA will lead on planning issues and the Environment Agency permitting team (03708 506506 or enquiries@environment-agency.gov.uk) will lead on permitting issues. See ‘Planning and Permitting Guidance’.

Does the non-mains system as proposed meet the requirements of the *General Binding Rules for small sewage discharges*? (FDA1, Q11)
Part 2A - Discharges to ground

Is the discharge in a Source Protection Zone 1 (SPZ1)? (FDA1, Q5)

YES

NON-MAINS PROPOSAL MAY BE UNSUITABLE – consider whether to:

- Require the applicant to provide a fuller assessment to the LPA to show that the system will treat and disperse effluent satisfactorily and that the discharge is not likely to cause pollution of groundwater or surface water;
- Recommend twin-tracking of permit and planning applications. The LPA will lead on planning issues and the Environment Agency permitting team (03708 506506 or enquiries@environment-agency.gov.uk) will lead on permitting issues. See ‘Planning and Permitting Guidance’; or
- Refuse the application in line with national planning policy.

NO

Will the discharge be made to a drainage field designed and constructed in line with BS6297:2007 + A1:2008? (FDA, Q5)

YES

NO

Do the results of the FDA or equivalent information indicate that any of the following apply? (FDA1, Q5, 6, 7 & 8)

Q6a. The soakage characteristics of the ground fall outside of the range of 15–100 sec/mm as recommended by the BS6297:2007 + A1:2008 for percolation tests (Not applicable to existing discharges unless undergoing significant modification).

Q6b. The proposed non-mains system is on marshy ground or ground prone to waterlogging or flooding.

Q6c. The drainage field is located on artificially raised or made ground, or ground that is likely or suspected to be contaminated (Not applicable to existing discharges unless undergoing significant modification).

Q6d. The drainage field will involve a direct discharge to the water table

Q7. The application site plus land available for any drainage field is less than 250m².

Q8. The drainage field is located within

- 10m of a watercourse, permeable drain or land drain;
- 50m from a groundwater abstraction point for drinking water (well, borehole or spring);
- 50m of another soakaway system/drainage field; or
- 15m of any building.

NON-MAINS PROPOSAL MAY BE UNSUITABLE – consider whether to:

- Require the applicant to provide a fuller assessment to the LPA to show that the system will treat and disperse effluent satisfactorily and that the discharge is not likely to cause pollution of groundwater or surface water;
- Recommend twin-tracking of permit and planning applications. The LPA will lead on planning issues and the Environment Agency permitting team (03708 506506 or enquiries@environment-agency.gov.uk) will lead on permitting issues. See ‘Planning and Permitting Guidance’; or
- Refuse the application in line with national planning policy.

NO

Return to part 2 flowchart
Part 3: Cesspools

Has the applicant provided a satisfactory justification for foul discharge to cesspool over other preferred methods in the non-mains hierarchy as set out in the PPG and Building Regulations Approved Document H? (FDA1, Q4)

- **NO**
- **YES**

Do the results from the FDA indicate any of the following? (FDA1, Q9)

1. Cesspool is less than 7m away from any habitable part of a building.
2. No vehicular access for emptying within 30m.
3. Non-mains system cannot be emptied or maintained without the contents being taken through a dwelling or place of work.

- **YES**
- **NO**

Has the applicant provided details of how they propose to maintain the system? (FDA1, Q12)

- **NO**
- **YES**

LPA should ask applicant to provide details of how they propose to maintain the system and/or secure maintenance through imposition of conditions and legal agreement.

- **NON-MAINS PROPOSAL MAY BE UNSUITABLE** – consider whether to:
  - Require the applicant to provide satisfactory justification to the LPA to demonstrate why a cesspool should be used and why other options are infeasible; or
  - Refuse the application in line with national planning policy.

Include appropriate conditions requiring verifiable records and checks on construction and subsequent operation of the cesspool in any permission and ensure any necessary legal agreement in place to cover issues of siting, design and maintenance.