



Department
for Environment
Food & Rural Affairs

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Environment
Agency

Consultation on reform of the regulatory system to control small sewage discharges from septic tanks and small sewage treatment plants in England

April 2014



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Reform of the regulatory system to control small sewage discharges from septic tanks and small sewage treatment plants in England

We are proposing **(a)** a simpler regulatory framework for the whole of England and **(b)** a further deregulatory measure to move to a more risk-based approach to permitting.

The consultation is principally being conducted as an [online consultation](#). If you prefer, you can also respond by email to [SSDs Reform](#) or by writing to us at the address below.

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The consultation will be open for six weeks:

Consultation **opens on 30 April 2014**

Consultation **closes on 10 June 2014**

When this consultation ends, we will summarise all responses and place this summary online at www.gov.uk/defra. This summary will include a list of names of organisations that responded but no individual names, addresses or other contact details. If you require a hard copy of the summary, or have any other enquiries, please contact us by email at [SSDs Reform](#).

The proposed new approach to regulating septic tanks and small sewage treatment plants for domestic use

1. Introduction

Our lives and livelihoods depend on a clean, healthy water environment. We need water to drink, to grow food and to support diverse habitats. Many pressures need to be managed to protect and improve the quality of our water. We all have a part to play in protecting our local environment and the water resources we use. Government can play its part by making necessary regulation practical and easily understood. We are working to control and prevent pollution to protect people's health and wellbeing, and that of the natural environment. This includes preventing contamination of drinking water supplies and pollution of the environment from septic tanks and other small sewage treatment plants. These are types of wastewater systems¹, often used where properties are not connected to the mains sewerage network and are designed to use naturally occurring biological processes to break down sewage and discharge a less-polluting effluent.

This consultation proposes a new approach to regulating domestic² wastewater systems where the discharges are small for example systems serving individual or small groups of properties. Such discharges are known as small sewage discharges (SSDs)³. The aims of the proposals are, firstly to simplify existing regulation within less sensitive areas (which cover most of the country) by removing registration and record keeping requirements whilst keeping key requirements for preventing pollution, and secondly, to provide a more risk-based approach to permitting so that permits are only required in the most sensitive areas where a higher level of protection is needed.

¹ Septic tanks provide a basic level of treatment, separating out liquid from solids and discharging effluent through a drainage field into the ground. Small sewage treatment plants provide a better level of treatment so that discharges can be made to ground or to surface water. Further details are in the Glossary.

² Domestic sewage includes wastes arising from normal domestic activities wherever carried out. Therefore, sewage from schools, restaurants, takeaways, holiday parks and nursing homes is domestic. Determining whether a discharge contains trade effluent should not involve a detailed audit of the substances used by an applicant on a particular site. If the effluent is broadly of a domestic nature it is domestic sewage.

³ SSDs are defined as discharges of domestic sewage of 2 cubic metres or less per day to ground or 5 cubic metres or less per day to surface water.

The proposed approach would deliver the necessary controls to prevent pollution, protect public health, improve drinking water supplies and protect sensitive habitats, while:

- reducing burdens on rural households and businesses
- reducing the number of people who need to have permits
- reducing the number of pollution incidents from SSDs
- encouraging local responsibility

Implementing the new approach would involve amendment of legislation: the Environmental Permitting (England and Wales) Regulations 2010 which are made under the Pollution, Prevention and Control Act 1999. Annex 1 gives details about the legal and regulatory framework.

We consider the proposed approach will meet our EU obligations under the 2000 Water Framework Directive, the 2006 Groundwater Directive and contribute to aims under the 1998 Drinking Water Directive.

Responses to this consultation will inform decisions on changes to the regulation of septic tanks and small sewage treatment plants. The existing system of registration in less sensitive areas, which is currently suspended, could be resumed but would not deliver any of the deregulatory benefits that we would like to achieve.

The proposals relate to England only and would be expected to come into force in January 2015 if implemented.

2. Who this consultation is aimed at

This consultation will be of particular interest to householders and businesses in rural areas, who have properties not connected to mains sewerage networks. This may include people who live or have holiday accommodation in such areas, and those who operate small businesses such as pubs, restaurants, cafes, campsites, visitor attractions and car parks which use septic tanks or package treatment plants to dispose of their waste water. The consultation only concerns domestic sewage, and not sewage from industrial processes.

The consultation will also be of interest to the water and waste industries, environmental organisations, land owners and land management organisations, farmers, local authorities, the tourist industry, estate agents, property management companies and legal and conveyancing professions.

3. Tackling pollution from septic tanks and small sewage treatment plants

There are estimated to be at least 400,000 SSDs in England, the majority of which are from septic tanks. Systems that produce these discharges should not cause pollution or contribute to ill health through poor maintenance or installation. Well maintained systems that are operating as intended present very little risk. However evidence from the Environment Agency indicates that some SSDs are causing pollution of rivers and groundwater supplies, including those that are used to supply drinking water (see Annex 4). Pollution from poorly maintained systems is often the subject of complaints for example between neighbours or to the Environment Agency and local authorities.

Groundwater provides a third of our drinking water in England, and it also maintains the flow in many of our rivers. Three-quarters of groundwater pumped from boreholes or taken from springs is used for public water supply. Of the remainder, many households, hospitals, farms and bottling and food processing plants rely on their own groundwater supplies. It is crucial that we look after these sources to ensure that our water is completely safe to drink.

Prevention of this sort of pollution is achievable through a mixture of practical action by septic tank owners, effective legislation and proportionate risk-based regulation. As part of the Government's ongoing commitment to better regulation, and in particular to improving environmental legislation through the removal of unnecessary regulatory burdens, we have reviewed the regulatory system for small sewage discharges. We believe that a lighter touch, more proportionate and risk based approach could be established, removing some existing and unnecessary burdens on households and businesses in rural areas whilst still ensuring the essential protection of water resources, sensitive areas and rare habitats. We are intending to keep existing requirements necessary to prevent pollution and rename these as general binding rules⁴ which would apply across the whole of England.

4. What is not part of this consultation

The consultation focuses only on discharges from domestic waste systems. Discharges from wastewater systems for larger groups of properties, estates and larger commercial businesses are out of scope of this consultation – no changes are proposed for how those discharges are regulated.

The proposals do not alter the powers of the Environment Agency as the Regulatory Authority to deal with people who cause pollution, nor do they seek to change the offences

⁴ 'General binding rules' is a term given to legally binding rules in regulations that provide minimum standards or direct conditions that apply to the general population. In this case they would apply to anyone who owns a septic tank or small sewage treatment plant which makes a small sewage discharge.

and penalties set by the Environmental Permitting (England and Wales) Regulations 2010, which remain in force.

Environmental permitting in groundwater Source Protection Zone 1s (SPZ1s) is mandatory since it remains critical to protect drinking water supplies and public health and prevent pollution and contamination of boreholes, wells and other abstraction sources. This aspect of the permitting system is out of scope for this consultation and no changes to the existing regulatory approach are proposed. SPZ1s remain *designated sensitive areas* for small sewage discharges, where a high level of protection and prevention of pollution is essential.

Sensitive habitats and Protected Areas listed in Annex 3 Table 1 that need a high level of protection from pollution will remain *designated sensitive areas* for small sewage discharges and are out of scope of this consultation.

Wastewater systems that drain into a cesspit are also out of scope of the consultation, since this type of system does not discharge to a drainage field or soak-away, but have to be regularly emptied by tanker and waste taken to a sewage treatment works.

Consultation

We are proposing a simpler regulatory framework for England that will apply to everyone who has a small sewage discharge (SSD). We are also proposing a further deregulatory measure to move to a more risk-based approach for permitting by reducing the number of *designated sensitive areas* where permits will be required for small sewage discharges. (Note question numbers in this document relate to the [online consultation](#) which also includes five preliminary questions for respondents.)

5. The proposed new approach to regulating small sewage discharges

The proposed framework would comprise amended regulations (Environment Permitting Regulations 2010) and requirements set by the Environment Agency on the location and siting of equipment and drainage arrangements. Together these would be known as the *general binding rules*. The *general binding rules* would apply to the whole of England, including sensitive areas. In or near *designated sensitive areas*, which need a higher level of protection, permits would also be required in addition to the general binding rules. Areas removed from the list of *designated sensitive areas* would still be governed by the *general binding rules*. Section 6 explains the changes we are proposing to enable a more risk-based approach to permitting in sensitive areas.

The amended regulations would continue to set the controls that govern discharges to groundwater and to surface waters to prevent pollution.

We propose to simplify the regulatory framework by:

1. Removing the existing registration scheme
2. Removing the requirement to keep records of maintenance work (records are currently required to be kept for five years)
3. Removing the requirement to notify the Environment Agency if the waste water system ceases to be in operation
4. Retaining (and updating) the requirements that apply to England for controlling small sewage discharges from domestic systems (listed below)
5. Retaining (and updating) guidance on technical standards set by the Environment Agency through their duties as the Regulatory Authority to protect water resources and the environment
6. Clarifying that septic tanks and small sewage treatment plants should meet British Standards in force at time of installation

7. Clarifying that responsibility for the small sewage discharge lies with the owner of the property or land on which a discharge is made or the legal tenant if responsibility is transferred as part of a rental or leasehold agreement.
8. Implementing a more focused approach to permitting by reducing the number of *designated sensitive areas* where owners are routinely required to have an environmental permit for their discharge.

We propose to keep the following as standard requirements⁵ (general binding rules) - further details are in Annex 2:

1. The discharge from a small sewage treatment plant is 5 cubic metres per day or less to surface waters and 2 cubic metres per day or less if made to ground.
2. The discharge from a septic tank is 2 cubic metres per day, and must be made to ground. (Septic tanks must not discharge to inland fresh waters or coastal waters).
3. The discharge must not cause pollution of groundwater or surface waters.
4. The discharge cannot be reasonably, at the first time it is made, be made to a mains sewer.
5. The system must be installed, operated and maintained in accordance with the manufacturer's specification and in line with guidance from the Environment Agency. This includes periodically removing waste sludge (to be done by an authorised person).
6. The sewage must only be domestic and not trade effluent.
7. Discharges to ground must be outside a groundwater Source Protection Zone 1, unless a permit is in place and be further than 50 metres from any well, spring or borehole that is used to supply water for domestic or food production purposes.
8. The owner must ensure a system is appropriately decommissioned where it ceases to be in operation so that there is no risk of pollutants entering ground water or entering inland fresh waters or coastal waters.
9. If a property is sold, the owner must give the new owner a written notice stating that a small sewage discharge is being carried on the land, and giving a description of the waste water system and its maintenance.

To take forward the simplifying measure outlined in point 6 of the proposals, we propose an additional requirement:

10. The equipment must meet the British Standard in force at time of installation.

⁵ In the Environmental Permitting (England and Wales) Regulations 2010, Schedule 3 Part 2 and Part 3

Benefits of proposals

Removing the registration scheme, the requirement to keep records and the requirement to notify the Environment Agency if the discharge is stopped

The registration scheme we would like to remove is explained in Annex 5. It was brought in in 2010 and suspended in 2011 following feedback that the requirement to register had not been communicated effectively and that the registration system itself was complex and burdensome. The requirement to keep records of maintenance for five years and the requirement to notify the Environment Agency if a discharge is stopped are no longer considered to be necessary. However we will still encourage people to keep their own records of maintenance as this will be useful for a number of reasons, for example when selling a property, or checking when their system needs to be emptied.

The principal benefit of removing these requirements will be to remove administrative burdens on at least 400,000 rural households and businesses who are responsible for septic tanks or small sewage treatment plants. The changes will also enable some administrative savings by the Environment Agency. Retaining the requirements (*general binding rules*) for the location, siting and maintenance of small sewage treatment plants will benefit the local environment, help prevent diffuse pollution, reduce the number of pollution incidents, ensure the essential protection of water resources, sensitive areas and rare habitats, and contribute to reducing the amount of treatment needed to ensure the quality of drinking water.

Q6 Do you agree with removing the requirements of registration, record keeping and notification (points i to iii above)?

Clarifying that septic tanks and small sewage treatment plants should meet British Standards at time of installation

We are proposing to amend the legislation to clarify that septic tanks and small sewage treatment plants should meet the British Standards in force at the time the system is first installed. This follows concerns voiced by some owners of systems in place for several decades that they will be made to upgrade to meet current British Standards. As long as a system is functioning well, meeting the needs of the household or business and not causing pollution there will be no need to change it.

Clarifying responsibilities for small sewage discharges

Under the current registration system it is the “occupier” of the property connected to the SSD who is responsible for registering but the “operator” of the SSD who is responsible for applying for a permit if one is required. This has led to ambiguity in the interpretation of who is responsible where the occupier is a tenant.

We propose to clarify this by just using one term “operator” and defining this as the owner of the property or the legal occupier if responsibility is transferred through a rental or leasehold agreement.

Q7 Do you have any views on the new approach for regulating small sewage discharges through general binding rules? (points iv to viii above)

Q8 If you disagree with the proposed approach, can you suggest an alternative one?

Q9 The proposed changes outlined in this consultation require the Environmental Permitting (England and Wales) Regulations 2010 to be amended. Do you have any comments on the proposed draft legislation in Annex 1?

6. Proposed new approach to enable risk-based permitting in sensitive areas

Permitting delivers a higher level of protection principally because of the scrutiny the Environment Agency makes on the permit applications. It allows the Environment Agency to take case by case judgements based upon risk assessments in sensitive areas, increasing regulatory control where it is needed to protect the environment. Environmental permits for SSDs currently attract a one-off application charge of £125 (to pay for a site specific assessment) and no annual subsistence charge.

We are proposing a deregulatory measure to move to a more risk-based approach to permitting by rationalising the list of *designated sensitive areas* (see Annex 3 for further information). Under the new proposals everyone who has a septic tank or small sewage treatment plant will be expected to follow the *general binding rules* as a minimum. In or near *designated sensitive areas* where a higher level of protection is needed, small sewage discharges will continue to require assessment and permits as necessary.

As at February 2014 the following areas are listed by the Environment Agency as *designated sensitive areas*:

Groundwater Source Protection Zone 1s (SPZ1), Special Areas of Conservation, Special Protection Areas, Ramsar sites, Sites of Special Scientific Interest (SSSIs) designated for biological and/or geological reasons, designated bathing waters, shellfish protected waters, local wildlife sites, sites where protected species are located, protected habitats, national nature reserves, local nature reserves, ancient woodlands, and scheduled monuments(See Glossary for definitions).

Of that list, SPZ1, Special Areas of Conservation, Special Protection Areas, Ramsar sites, Biological SSSIs, designated bathing waters and shellfish protected waters **will continue to be designated sensitive areas** for protection from pollution from small sewage discharges.

We proposed that the remaining areas, as set out in Table 1, are removed from the list of *designated sensitive areas* and instead be governed solely by the *general binding rules*. It is this aspect on which we invite views.

Table 1: Proposed areas to be removed from the designated sensitive areas list for small sewage discharges

Protected Areas	Reason for removal
SSSIs (geological)	Certain SSSIs are designated for geological features only. It is extremely unlikely that an SSD could cause any physical damage to a geological feature.
Sites where protected species and protected habitats are located	SSDs pose a limited risk to protected species and habitats in isolation. Important populations of protected species and areas of habitats are associated with designated sites (such as SACs and Ramsars) and will be afforded protection through this route.
National nature reserves	National nature reserves are also designated as SSSIs and therefore risk to these sites is already accounted for.
Local nature reserves and local wildlife sites	These sites have a nature conservation function and are areas for people to experience wildlife. They are not afforded the same level of protection as other sites and therefore the risk of SSDs affecting these sites is low.
Ancient woodland	Ancient woodlands are areas that have existed since at least 1600. Only a direct discharge to ground could affect an ancient woodland. The quantity of discharge from an SSD is highly unlikely to impact any site.
Scheduled monuments	It is extremely unlikely that an SSD could cause any physical damage to a monument.

Q10 Is this the right approach?

Q11 If you disagree with the proposed approach, can you suggest an alternative one?

Alternatively we could remove some of the proposed areas in Table 1, but not all, from the need to have a permit. Are there particular areas you feel may need to continue to have a higher level of protection from pollution from SSDs than the standard requirements?

Q12 For each area in Table 1 please say if you agree or disagree with the proposal to remove the area from the designated sensitive areas list and give reasons for your view

Or we could keep all the existing protected areas on the *designated sensitive areas* list i.e. no change.

Q13 If you favour no change please give your reasons for your view

7. Managing new discharges in sensitive areas

The Environment Agency currently takes a different approach to requiring permits in *designated sensitive areas* depending on whether the discharge is existing or new. An existing discharge is one which was in place before 6 April 2010; a new discharge is one which was in place on or after 6 April 2010 under the existing Environmental Permitting Regulations 2010. (Note: If the new approach is implemented then this date would change to the date the amendment comes into force.)

Permits are currently required for both existing and new discharges in groundwater Source Protection Zone 1 (SPZ1) areas⁶ For new discharges this allows assessment of the planned discharge before equipment is installed; for existing discharges this allows assessment of the equipment and its installation after it has been installed, with the ability to require improvements if necessary. The Regulations will continue to require permits in these highly sensitive areas due to the risk to drinking water supplies which one or more SSDs can pose. The Environment Agency will be taking steps to make people aware of their responsibilities and to encourage the take up of permits where these are necessary.

⁶ Source Protection Zone 1 (SPZ1) is the area immediately around a water supply (abstraction) that is most vulnerable to groundwater pollution.

For other *designated sensitive areas* such as those designated because of Sites of Special Scientific Interest (SSSIs) or European habitats sites (see glossary), the Environment Agency requires permits for SSDs in or near to these areas for **new** discharges. The main impact from SSDs is often due to the cumulative effects of a number of SSDs (discharging into a particular river for example) rather than from any one SSD. By requiring any new SSDs in such areas to have permits, the Environment Agency is able to impose additional controls where the impact from adding **new** discharges will be high, or even refuse a permit in some extreme cases. Permits are not usually required for **existing** discharges in these areas, as they have clearly already been installed. Instead, under the proposals these will be covered by general binding rules.

The Environment Agency proposes to continue this distinction between existing and new discharges in the future.

Q14 We would like to understand if people have any concerns about the regulatory approach to managing new and existing discharges in designated sensitive areas, bearing in mind that if our proposed new approach is implemented, the *general binding rules* will apply as minimum and that permits would set any additional conditions that might be needed in a particular area.

8. Any other comments?

Q15 Are there any other comments you would like to make about our proposals?

Glossary

Ancient woodland means woodland that has existed continuously since 1600 or before in England.

Cesspits are sometimes used to collect household waste in households not connected to the mains sewage system. A cesspit is a sealed pit, tank or covered cistern which can be used to dispose of urine and faeces. These are not designed to discharge into the environment and need to be regularly emptied. Regulation of cesspits is not affected by the proposals in this consultation.

Designated bathing waters are bathing waters that are monitored for bacterial pollution to protect the health of bathers. Each site will have initiatives in place for their protection.

Designated sensitive areas are areas that the Environment Agency, through their statutory duties under a range of legislation, determines are subject to stricter control to prevent pollution and require people to have a permit for their small sewage discharge.

Domestic sewage is sewage effluent from residential properties and services that originates predominantly from the human metabolism and from household activities. Domestic sewage includes wastes arising from normal domestic activities wherever these are carried out and includes sewage from, for example, schools, holiday parks, residential homes and restaurants.

European sites are habitats sites listed under the Conservation of Habitats and Species Regulations 2010 and include SACs, SPAs and Ramsar sites (see below).

General binding rules is a term given to legally binding rules in regulations that provide for minimum standards or conditions that apply to the general population. In this case they would apply to anyone who owns a septic tank or small sewage treatment plant which makes a small sewage discharge.

Local wildlife sites are identified and selected for their local nature conservation value. They protect threatened species and habitats acting as buffers, stepping stones and corridors between nationally-designated wildlife sites.

Operator - In this consultation we are using the term 'operator' as meaning the person or organisation who has control of a small sewage discharge. For households this will usually be the owner of the property.

National Nature Reserves are designated by Natural England and comprise of the 'very best parts of the country's Sites of Special Scientific Interest'. District and county councils have powers to acquire, declare and manage **Local Nature Reserves**. To qualify for Local Nature Reserve status, a site must be of importance for wildlife, geology, education or public enjoyment.

Protected Areas is the generic term given to a defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.

Protected Species are indigenous species of high conservation value or national importance that require international, national or local protection.

Ramsar sites are wetlands of international importance, designated under the Ramsar Convention. The Ramsar Convention is an international agreement, signed in Ramsar, Iran, in 1971, which provides for the conservation and good use of wetlands.

Scheduled monuments are nationally important archaeological sites or historic buildings, given protection against unauthorised change.

Shellfish Protected Waters are areas where shellfish such as mussels, oysters or clams are commercially grown and harvested for food.

Special Areas of Conservation (SACs) are areas given special protection under the European Union's Habitats Directive. SACs provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity.

Special Protection Areas (SPAs) are areas given special protection under the European Union's Habitats Directive. SPAs provide protection to rare and vulnerable birds and for regularly occurring migratory species.

Small sewage discharges (SSD) are discharges of domestic sewage of 2 cubic metres or less per day to ground from septic tanks or small sewage treatment plants, or 5 cubic meters or less per day to surface water from small sewage treatment plants.

Septic tanks and small sewage treatment plants (STPs) are 'on-site' treatment facilities for sewage and wastewater used generally where a connection to mains sewerage system is not practical. The most numerous of these in the UK is the septic tank.

Septic tanks are usually fibreglass tanks where solids collect and effluent is discharged to the ground through a 'drainage field' or 'soakage pit'. A package treatment plant is a more modern system with treatment of waste resulting in an effluent that is discharged either to a surface watercourse or to a drainage field (infiltration system). Septic tanks allow separation of the waste water ('black water' containing faeces, urine, toilet paper and sanitary items and 'grey water' which consists of washing water from baths, showers and sinks) into solids (sludge), liquids and a floating 'scum layer'. The solid portion is stored for collection and disposal at a sewage treatment works or used on agricultural land. During storage, anaerobic digestion by micro-organisms leads to a reduction in the volume of the sludge over time. The rate of accumulation of sludge will exceed the reduction in volume by digestion and the tank will eventually fill. Effluent from the tank is allowed to soak into the ground via a gravel filled trench, pit or similar (infiltration system). Secondary treatment is provided by a 'bio-film' which builds up in the base of the gravel trench or infiltration

system filtering out solids and bacteria. The soil surrounding the septic tank helps retard nutrients, especially phosphate.

Small sewage treatment plants (also known as package treatment plants (PTPs)) are a self contained unit that can treat sewage effluent to a higher standard than septic tanks. The effluent from these plants can be discharged to watercourses or groundwater. There are several different types of package treatment plant, each with a slightly different treatment technique. Each type provides a treatment unit or biological zone where the sewage comes into contact with micro-organisms that break down the organic matter in the sewage. They need a steady flow of sewage to keep the micro-organisms alive and to operate most effectively.

Sites of Special Scientific Interest (SSSI) are the country's very best wildlife and geological sites. They include some of the most spectacular and beautiful habitats; wetlands teeming with wading birds, winding chalk rivers, flower-rich meadows, windswept shingle beaches and remote upland peat bogs. The purpose of SSSIs is to safeguard, for present and future generations, the diversity and geographic range of habitats, species, and geological and physiographical features, including the full range of natural and semi-natural ecosystems and of important geological and physiographical phenomena throughout England. The sites included within the series of SSSIs are intended collectively to comprise the full range of natural and semi-natural habitats and the most important geological and physiographical sites. There are over 4,100 Sites of Special Scientific Interest (SSSIs) in England, covering around 8% of the country's land area. SSSI's are legally protected under the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way (CROW) Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006.

Source Protection Zone 1 (SPZ1) is the area immediately around a water supply (abstraction) that is most vulnerable to groundwater pollution. Where groundwater is abstracted for drinking water or food production a special zone is defined to protect the abstraction from pollution. Activities that may cause pollution within certain distances have to be managed carefully. The Environment Agency does this by assessing the discharge and controlling it through environmental permitting.

A SPZ1 is defined as the 50 day travel time for ground water flow from a point just below the water table to the abstraction source, and has minimum radius of 50 m. Where a modelled SPZ1 has not been formally defined, a default radius of 50 m applies, as is the case for most private drinking water supply sources.

There are also SPZ2s and SPZ3s which cover a wider area. Small sewage discharge permits are required for discharges to ground within an SPZ1.

The Environment Agency publishes [maps](#) of Groundwater Source Protection Zones on its website.

Annex 1 The legal and regulatory framework for small sewage discharges

The Water Framework Directive (2000/60/EC) (WFD) includes requirements on Member States to prevent and control pollution of water bodies through prior regulation and to monitor the ecological status of water bodies. The Groundwater Directive (2006/118/EC) (GWD) requires that inputs of pollutants into groundwater are prevented or limited so as to control pollution, this includes small sewage discharges. In the UK, the relevant legislation is the Environmental Permitting (England and Wales) Regulations 2010 (EPR 2010) which is made using powers in the Pollution Prevention and Control Act 1991. The Regulations set out the legal obligations of owners of septic tanks and small sewage treatment plants which make small sewage discharges (SSDs). The Environment Agency is the regulatory authority and provides guidance on the siting and location of SSDs to prevent pollution. The EPR 2010 work in conjunction with the Building Regulations 2010. The Building Regulations govern the installation of septic tanks and small sewage discharges providing guidance for design and manufacturing standards, for construction and location. These work alongside Regulations transposing the Drinking Water Directive (98/83/EC), on the quality of water intended for human consumption (drinking water). Local authorities and the Drinking Water Inspectorate are the regulatory authorities for drinking water quality.

The EPR 2010 set up a two-part system to regulate SSDs. In *designated sensitive areas*, where SSDs could impact either drinking water quality or other important environmental areas, the owners of septic tanks and small sewage treatment plants must obtain a permit to discharge. In less sensitive areas (most of the country), SSD owners have been required to register and comply with a set of conditions in order to be exempt from the need for a permit.

The *designated sensitive areas* comprise 'Groundwater Source Protection Zone 1s' (SPZ1s) which protect drinking water sources, and other protected areas for example Sites of Special Scientific Interest (SSSIs). As the regulatory authority, the Environment Agency takes into account its duties to protect water resources, the environment and sensitive habitats when determining the *designated sensitive areas* where environmental permits are required.

The registration scheme managed waste water systems (facilities) exempt from routinely needing a permit. By completing the registration people also agreed to abide by the requirements for managing their septic tank or small sewage treatment plant. A description of the registration scheme is in Annex 5.

The requirement for permits in *designated sensitive areas* remains in force. Environmental permits for SSDs currently attract a one-off application charge of £125 (to pay for a site specific assessment) and no annual subsistence charge. The Environment Agency reviews its charging scheme annually. The next review will be in September 2014 and this may include a review of the charges for SSDs.

The registration scheme for less sensitive areas (the majority of the country) was suspended in 2011 on grounds of being too burdensome. The Environment Agency issued a Regulatory Position Statement explaining that they will not take enforcement action against small sewage discharge owners who meet the exemption criteria but have not registered, unless a discharge has caused, or is likely to cause, pollution.

The decision to suspend the registration scheme was made following feedback that the requirement to register for an exemption had not been communicated effectively and that the registration system was complex and burdensome. We have considered the feedback in drafting the proposals on which we are consulting in this document.

The risks to the environment during the suspension of the registration scheme are limited and do not change because the Environment Agency are able to deal with pollution incidents as these arise and continue to be able to take appropriate enforcement action as necessary.

The Environment Agency has duties to monitor water resources and the environment to prevent and control pollution. The registration scheme was originally intended to provide location information to assist with monitoring. The Environment Agency will obtain information on the location of SSDs by other means such as data from water companies and information provided by sewage treatment plant installation and maintenance companies.

If the new approach is adopted, the existing public register will be archived, and those on it informed. The register will still be publically available as a record, but it will no longer be updated or maintained as a live public register.

We are not proposing any changes to the enforcement approach taken by the Environment Agency (details of which are at in the supporting document “The Environment Agency’s enforcement approach for small sewage discharges”). Where a waste water system does not meet the conditions for a small sewage discharge, the Environment Agency will work with the owner to help them comply. Where that is not possible, then the Environment Agency would consider the discharge to be the same as from a regulated facility and would require the owner to have a permit and could take other enforcement action if necessary in line with the Environmental Permitting Regulations.

If the new approach is adopted, then amendments to the EPR would be as follows:

- remove the registration requirements for sewage treatment plants discharging 5 cubic metres per day or less of sewage effluent into surface waters;
- remove the registration requirements for septic tanks or sewage treatment plants discharging 2 cubic metres per day or less of sewage effluent into groundwaters;
- replace the EA’s duties as ‘exemption registration authority’ with duties as ‘exemption authority’;

- clarify that the operator is responsible for compliance with the general binding rules (see section 5);
- oblige the operator to additionally ensure that the septic tank or small sewage treatment plant complies with the relevant British standard at the time the equipment is first installed;
- remove requirements to keep records of maintenance work;
- remove notification requirements to the exemption registration authority when the exempt discharge activity ceases to be in operation.

Draft amendments to the Environmental Permitting (England and Wales) Regulations 2010

The draft amendment is included in this document for consultation purposes. It demonstrates what the amendment may say but may be subject to further drafting changes.

STATUTORY INSTRUMENTS

2014 No.0000

ENVIRONMENTAL PROTECTION, ENGLAND

**The Environmental Permitting (England and Wales) (Amendment)
(England) Regulations 2014**

<i>Made</i>	- - - -	***
<i>Laid before Parliament</i>		***
<i>Coming into force</i>	- -	***

These Regulations are made in exercise of the powers conferred by section 2 of, and Schedule 1 to, the Pollution Prevention and Control Act 1999⁽⁷⁾.

The Secretary of State has in accordance with section 2(4) of, and Schedule 1 to, the Pollution Prevention and Control Act 1999 consulted—

- (a) the Environment Agency;
- (b) such bodies or persons appearing to the Secretary of State to be representative of the interests of local government, industry, agriculture and small businesses as the Secretary of State consider appropriate; and
- (c) such other bodies or persons as the Secretary of State considers appropriate.

The Secretary of State makes the following Regulations.

Citation, extent and application

1. These Regulations—

- (a) may be cited as the Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2014; and
- (b) apply in relation to England.

Amendment of the Environmental Permitting (England and Wales) Regulations 2010

2. The Environmental Permitting (England and Wales) Regulations 2010⁽⁸⁾ are amended in accordance with regulations 3 to 12.

Regulation 2 (interpretation: general)

3. In regulation 2(1) after the definition of “exempt water discharge activity” insert—

⁽⁷⁾ 1999 c.24. Paragraph 25 of Schedule 1 was amended by section 105(1)(a) and (b) of the Clean Neighbourhoods and Environment Act 2005 (c.16). There are other amendments to Schedule 1, none of which is relevant to these Regulations.

⁽⁸⁾ S.I. 2010/675 as amended by S.I. 2010/2933, S.I. 2011/988, 2043 and 881 and S.I. 2013/390.

““exemption authority” has the meaning given in paragraph 2 of Schedule 2;”.

Regulation 5 (interpretation: exempt facilities)

4. In regulation 5(1)—

(a) for the definition of “exempt groundwater activity”—

(i) for sub-paragraph (a) substitute—

“(a) a stand-alone groundwater activity that meets the requirements of paragraph 5, or in relation to England paragraph 5A, of Schedule 2;”

(ii) for sub-paragraph (b)(iii) substitute—

“(iii) meets the requirements of paragraph 5, or in relation to England paragraph 5A, of Schedule 2;”;

(b) for the definition of “exempt water discharge activity” substitute—

““exempt water discharge activity” means a stand-alone water discharge activity that meets the requirements of paragraph 4, or in relation to England, paragraph 4A of Schedule 2.”.

Regulation 60 (power to require the provision of information)

5. In regulation 60(1) for “regulator or exemption registration authority” substitute “regulator, exemption registration authority or exemption authority”.

Regulation 61 (directions to regulators and exemption registration authorities: general)

6.—(1) In regulation 61 for the heading substitute “Directions to regulators, exemption registration authorities and exemption authorities: general”.

(2) In regulation 61(1), (2) and (4) for “regulator or exemption registration authority”, in each place occurring, substitute “regulator, exemption registration authority or exemption authority”.

Regulation 64 (guidance to regulators and exemption registration authorities)

7. In regulation 64—

(a) for the heading substitute “Guidance to regulators, exemption registration authorities and exemption authorities”;

(b) for “regulator or exemption registration authority” substitute “regulator, exemption registration authority or exemption authority”.

Regulation 74 (exempt groundwater activities)

8. In relation to England only, regulation 74(6) is revoked on and after 1st January 2015.

Schedule 2 (exempt facilities: general)

9. Schedule 2 is amended as follows—

(a) in paragraph 1 (interpretation: general)—

(i) for the heading substitute “Interpretation and application: general”;

(ii) after sub-paragraph (1) insert—

“(2) Paragraphs 4 and 5 do not apply in relation to England”;

(b) in paragraph 2 (interpretation: exemption registration authority)—

(i) for the heading substitute “Interpretation: exemption registration authority and exemption authority”;

(ii) after sub-paragraph (5) add—

“(6) In relation to England—

(a) the Agency is the exemption registration authority in relation to—

- (i) a water discharge activity falling within a description in paragraph 1 of Part 2 of Schedule 3;
 - (ii) a groundwater discharge activity falling within a description in paragraphs 2 or 4 of Part 3 of Schedule 3.
- (b) the Agency is the exemption authority in relation to—
- (i) a water discharge activity falling within a description in paragraph 2 of Part 2 of Schedule 3;
 - (ii) a groundwater discharge activity falling within a description in paragraph 3 of Part 3 of Schedule 3”;
- (c) after paragraph 4 (exempt water discharge activities) insert—

“Exempt water discharge activities: England

4A.—(1) This paragraph applies in relation to England.

(2) For the purpose of the definition of “exempt water discharge activity”, the requirements are—

- (a) that a water discharge activity—
 - (i) falls within a description in Part 2 of Schedule 3;
 - (ii) satisfies, in relation to an activity of that description, the relevant conditions specified in Part 2 of that Schedule;
 - (b) for a water discharge activity falling within a description in paragraph 1 of Part 2 of Schedule 3, that—
 - (i) the activity is registered by the operator, and
 - (ii) subject to paragraph 9(10) the operator is registered in relation to that activity; and
 - (c) that the water discharge activity does not cause pollution of inland freshwaters, coastal waters or relevant territorial waters.”
- (d) after paragraph 5 (exempt groundwater activities) insert—

“Exempt groundwater activities: England

5A.—(1) This paragraph applies in relation to England.

(2) For the purpose of the definition of “exempt groundwater activity”, the requirements are—

- (a) that a groundwater activity—
 - (i) falls within a description in Part 3 of Schedule 3;
 - (ii) satisfies, in relation to an activity of that description, the relevant conditions specified in Part 3 of that Schedule;
 - (b) for a groundwater discharge activity falling within a description in paragraphs 2 or 4 of Part 3 of Schedule 3 that—
 - (i) the activity is registered by the operator; and
 - (ii) subject to paragraph 9(10) that the groundwater activity does not cause pollution of groundwater.”
- (e) In paragraph 9 (exclusion from the register of information affecting national security) sub-paragraph 10—
- (i) after “4(b)” add “,4A(2)(b),”
 - (ii) for “or 5(b)” substitute “5(b) or 5A(2)(b).”

Schedule 3 Part 2 (exempt water discharge activities: descriptions and conditions)

10.—(1) Paragraph 2 (small discharges of sewage effluent) of Part 2 of Schedule 3 is amended as follows—

- (a) after sub-paragraph (2) add—

“(3) Paragraph 2 does not apply in relation to England.”.

(2) After paragraph 2 insert—

“Small discharges of sewage effluent: England

2A.—(1) This paragraph applies in relation to England.

(2) For the purpose of paragraph 4A(2)(a)(i) of Schedule 2, the description is the discharge from a sewage treatment plant of 5 cubic metres per day or less of sewage effluent into inland freshwaters, coastal waters or relevant territorial waters.

(3) For the purpose of paragraph 4A(2)(a)(ii) of that Schedule, the conditions in relation to a water discharge activity described in sub-paragraph (2) are that the operator ensures—

- (a) that all works and equipment used for the treatment of sewage effluent and its discharge comply with the requirements specified in guidance issued by the appropriate authority in relation to—
 - (i) design and manufacturing standards,
 - (ii) construction, installation and operation specifications,,
 - (iii) siting and installation, and
 - (iv) the capacity of the equipment;
 - (b) that all works and equipment used for the treatment of sewage effluent and its discharge comply with the relevant British standard at the time the equipment is first installed;
 - (c) that the discharge cannot reasonably, at the time it is first made, be made to the foul sewer;
 - (d) that the discharge does not contain trade effluent;
 - (e) that all works and equipment used for the treatment of sewage effluent and its discharge are maintained in accordance with the manufacturer’s specification;
 - (f) that all works and equipment used for the treatment of sewage effluent and its discharge are appropriately decommissioned when the exempt facility ceases to be in operation so that there is no risk of pollutants entering inland freshwaters or coastal waters;
 - (g) that, before an operator ceases to be in occupation of land on which an exempt water discharge activity is carried on, the operator must give to the person who will next be in occupation of the land a written notice—
 - (i) stating that an exempt water discharge activity is being carried on on the land;
 - (ii) containing a description of the exempt facility; and
 - (iii) stating the conditions that must be satisfied in relation to the exempt facility.
- (4) In this paragraph “operator” means—
- (a) the owner of the property at which the water discharge activity described in sub-paragraph (2) is carried out, where that person is occupying the property; or
 - (b) a person who—
 - (i) is entitled to occupy that property by virtue of a rental or leasehold agreement; and
 - (ii) has responsibility for the operation of the water discharge activity under a term of that rental or leasehold agreement.”.

Schedule 3 Part 3 (exempt groundwater activities: descriptions and conditions)

11.—(1) Paragraph 3 (small discharges of sewage effluent) of Part 3 of Schedule 3 is amended as follows—

(2) after sub-paragraph (2) insert—

“ (3) Paragraph 3 does not apply in relation to England”.

(3) After paragraph 3 insert—

“Small discharges of sewage effluent: England

3A.—(1) This paragraph applies in relation to England.

(2) For the purpose of paragraph 5A(2)(a)(i) of Schedule 2, the description is a discharge from a septic tank or sewage treatment plant of 2 cubic metres per day or less of sewage effluent that results in the input of pollutants to groundwater.

(3) For the purpose of paragraph 5A(2)(a)(ii) of that Schedule, the conditions in relation to a groundwater activity of that description are—

- (a) that all works and equipment used for the treatment of sewage effluent and its discharge comply with the requirements specified in guidance issued by the appropriate authority in relation to—
 - (i) design and manufacturing standards,
 - (ii) construction, installation and operation specifications,
 - (iii) siting and installation of infiltration systems, and
 - (iv) the capacity of the equipment;
 - (b) that all works and equipment used for the treatment of sewage effluent and its discharge comply with the relevant British standard at the time the equipment is first installed;
 - (c) that the discharge cannot reasonably, at the time it is first made, be made to the foul sewer;
 - (d) that the discharge does not contain trade effluent;
 - (e) that the discharge does not result in an input of pollutants to groundwater—
 - (i) within 50 metres of a point at which water is abstracted from underground strata, or
 - (ii) within a zone defined by a 50-day travel time for groundwater to reach a groundwater abstraction point that is used to supply water for domestic or food production purposes;
 - (f) that all works and equipment used for the treatment of sewage effluent and its discharge are maintained in accordance with the manufacturer's specification;
 - (g) that the operator must ensure that all works and equipment for the treatment of sewage effluent and its discharge are appropriately decommissioned when the exempt facility ceases to be in operation so that there is no risk of pollutants entering the groundwater;
 - (h) that, before an operator ceases to be in occupation of land on which an exempt groundwater activity is carried on, the operator must give to the person who will next be in occupation of the land a written notice—
 - (i) stating that an exempt groundwater activity is being carried on on the land;
 - (ii) containing a description of the exempt facility; and
 - (iii) stating the conditions that must be satisfied in relation to the exempt facility.
- (4) In this paragraph “operator” means—
- (a) the owner of the property at which the groundwater activity described in sub-paragraph (2) is carried out, where that person is occupying the property; or
 - (b) a person who—
 - (i) is entitled to occupy the property by virtue of a rental or leasehold agreement; and
 - (ii) has responsibility for the operation of the groundwater activity under a term of that rental or leasehold agreement.”.

Schedule 24 (public registers)

12. In paragraph 1 (matters to be included in a public register) sub-paragraph (k) of Schedule 24 for “regulator or the exemption registration authority” substitute “regulator, the exemption registration authority or the exemption authority”.

Annex 2 Standard requirements (general binding rules) – further details

Table A2.1: Small sewage discharges to surface water

General binding rule	Explanatory Note
<p>The discharge must be 5 cubic meters or less per day in volume.</p>	<p>As a rough guide, 5 cubic metres of effluent would normally apply to groups of properties. As an example, it is approximately equivalent to the total combined discharge from 3 x three-bedroom houses + 4 x four-bedroom houses. See Environment Agency guidance for further detail on how to work out your daily discharge volume or contact the Environment Agency for advice.</p>
<p>The sewage must receive treatment from a package sewage treatment plant.</p>	<p>Discharges to a watercourse need to be properly treated to prevent pollution, which means that discharges from septic tanks or untreated discharges to a watercourse are not allowed.</p>
<p>The sewage must only be domestic.</p>	<p>Domestic sewage means sewage effluent from residential properties and services that originates predominantly from the human metabolism and from household activities. Domestic sewage includes wastes arising from normal domestic activities wherever these are carried out. Therefore, sewage from for example residential homes, restaurants, takeaways and nursing homes is domestic.</p>
<p>All works and equipment used for the treatment of sewage effluent and its discharge must comply with the relevant British standard that was in force at the time of the installation, and guidance issued by the appropriate authority on the capacity, and installation of the equipment.</p>	<p>It is important that the package treatment plant is the right size for the discharge and is correctly installed. Your local installation or maintenance company should be able to advise you.</p> <p>You can also refer to British Water’s ‘Flows and Loads 4’ and other guidance on the British Water website.</p>

General binding rule	Explanatory Note
The system must be installed, operated in accordance with the manufacturer's specification.	This is particularly important for new plants where the manufacturer's specification will be available. For older plants which don't have any documentation you can ask your local installer or maintenance company for advice.
Maintenance must be undertaken by someone who is competent.	Anyone who carries out maintenance on the package treatment plant should be suitably qualified, e.g. a British Water accredited service engineer. You can find a list of accredited service engineers on the British Water website.
Waste sludge from the system must be safely disposed of by an authorised person.	Ensure you use a reputable company to dispose of sludge from your package treatment plant and if possible check that they are registered as a waste carrier or broker.
The discharge must not cause pollution of surface water or groundwater.	<p>This is a general requirement which should be easy for you to meet as long as your plant is properly installed and maintained.</p> <p>The most important maintenance which you must carry out to prevent pollution is to have your package treatment plant regularly emptied (desludged). How often you need to do this will depend on the type of system and how much it is used - this should be covered by the operation and maintenance manual if you have one, otherwise as a minimum we recommend that the plant is desludged at least once every 6 months.</p>
In tidal waters, the discharge outlet must be below the low water mark.	This is to prevent potential odour problems at low tide.
For new discharges, the owner must apply for a permit if the discharge is in, or within 500m of, a SAC, SPA or Ramsar site, biological SSSI, or biological and geological SSSI.	SACs, SPAs, Ramsar sites and SSSIs are designated sensitive areas which can be affected by pollution from SSDs. Because of this, you need to apply for a permit if you want to make a new discharge in or near to one of these areas so that the Environment Agency can check that it

General binding rule	Explanatory Note
	<p>won't cause pollution, and will be properly controlled.</p> <p>You can check whether you need a permit for your SSD by contacting the Environment Agency.</p>
<p>New discharges must be more than 50 metres (to be increased to 500m from January 2015 to reflect tighter standards required by the revised Bathing Water Directive) from designated bathing waters or protected shellfish waters.</p>	<p>Pollution of identified bathing waters or protected shellfish waters from treated sewage effluent can present potential health risks, so new discharges are not allowed in or near to these areas.</p>
<p>New discharges must be made to a watercourse that has flow for at least 6 months per calendar year.</p>	<p>SSDs are not allowed to dry ditches or ones which rarely have water in them as this can cause pollution and problems with odour.</p>
<p>New discharges cannot be to an enclosed lake or pond.</p>	<p>Discharges must be made to a watercourse which has flow to allow the treated sewage to be diluted and pollutants to be broken down. Discharges to lakes or ponds are not allowed as the pollution often simply builds up, also causing potential odour problems.</p>
<p>New discharges must not be within 30 metres of a public foul sewer.</p>	<p>It is important that new properties are connected to the public sewerage system whenever possible as the sewage will be treated to a much higher standard than it would through a private septic tank or package treatment plant.</p> <p>Therefore if any part of the property is within 30m of a public sewer we would not usually allow a new SSD, unless there are mitigating circumstances such as natural barriers (e.g. a river) or other constraints which would make connection to public foul sewer unfeasible. If in doubt you should contact the Environment Agency to discuss.</p>

General binding rule	Explanatory Note
<p>For new discharges, any partial drainage field must be installed within 10 metres of the bank side of the watercourse.</p>	<p>A partial or seasonal drainage field acts as a soakaway during the summer (when surface water flows are low) with an overflow to a watercourse during the winter (when ground water levels are high). They need to be installed sufficiently close the watercourse in order to be treated as a discharge to surface water.</p>
<p>For new discharges, the owner must have obtained any necessary planning and building control approval for the treatment system.</p>	<p>This is to remind SSD owners of the need to ensure they have complied with the other legal requirements which control the use of small sewage treatment systems.</p>
<p>If a property is sold, the owner must give the new owner a written notice stating that a small sewage discharge is being carried on the land, and giving a description of the waste water system and its maintenance.</p>	<p>If you sell your house, you should write a letter to the new owner saying that the property has a small sewage discharge. You should also describe as far as you can the type of treatment system, location of the plant and its discharge point, and provide as much information on maintenance as you can, including a copy of the operation and maintenance manual for the plant if you have one.</p>
<p>The owner must ensure a system is appropriately decommissioned where it ceases to be in operation so that there is no risk of pollutants entering ground water or entering inland fresh waters or coastal waters.</p>	<p>If you no longer need to use your SSD e.g. because you connect to public foul sewer or the property is demolished, you should make sure anything that could cause pollution is removed such as any remaining sludge in the system.</p>

Table A2.2: Small sewage discharges to ground

General binding rule	Explanatory Note
<p>The discharge must be 2 cubic metres or less per day in volume.</p>	<p>As a rough guide, 2 cubic metres of effluent is approximately equivalent to the total combined discharge from 2 x four-bed-roomed houses or 14 people in a single property. See Environment Agency guidance for further detail on how to work out your daily discharge volume or contact the Environment Agency for advice.</p>
<p>The sewage must receive treatment from a septic tank and infiltration system (soakaway) or package sewage treatment plant</p>	<p>Discharges to ground need to be properly treated to prevent pollution, which means that untreated discharges are not allowed.</p>
<p>The sewage must only be domestic.</p>	<p>Domestic sewage means sewage effluent from residential properties and services that originates predominantly from the human metabolism and from household activities. Domestic sewage includes wastes arising from normal domestic activities wherever these are carried out. Therefore, sewage from for example, residential homes, restaurants, takeaways and nursing homes is domestic.</p>
<p>All works and equipment used for the treatment of sewage effluent and its discharge must comply with the relevant British Standard that was in force at the time of the installation, and guidance issued by the appropriate authority on the capacity, and installation of the equipment.</p>	<p>It is important that the package treatment plant is the right size for the discharge and is correctly installed. Your local installation or maintenance company should be able to advise you.</p> <p>You can also refer to British Water’s ‘Flows and Loads 4’ and other guidance on the British Water website.</p>
<p>The system must be installed, operated in accordance with the manufacturer’s specification.</p>	<p>This is particularly important for new plants where the manufacturer’s specification should be available. For older plants which don’t have any documentation you can ask your local installer or maintenance company for advice.</p>

General binding rule	Explanatory Note
Maintenance must be undertaken by someone who is competent.	Anyone who carries out maintenance on the package treatment plant should be suitably qualified, e.g. a British Water accredited service engineer. You can find a list of accredited service engineers on the British Water website.
Waste sludge from the system must be safely disposed of by an authorised person.	Ensure you use a reputable company to dispose of sludge from your septic tank or package treatment plant and if possible check that they are registered as a waste carrier or broker.
The discharge must not cause pollution of surface water or groundwater.	<p>This is a general requirement which should be easy for you to meet as long as your plant is properly installed and maintained.</p> <p>The most important maintenance which you must carry out to prevent pollution is to have your septic tank or package treatment plant regularly emptied (desludged). How often you need to do this will depend on the type of system and how much it is used - this should be covered by the operation and maintenance manual if you have one, otherwise as a minimum we recommend that the plant is desludged at least once every 6 months.</p>
There must be no discharge to surface water.	Most discharges to ground are from septic tanks which do not treat sewage to a high enough standard to allow it to be released to a water course. Therefore discharges to surface water are not allowed directly from septic tanks.
For existing and new discharges, the owner must apply for a permit if the discharge is within a groundwater Source Protection Zone 1 (the Environment Agency can check this for you) or is within 50 metres from any well or borehole that is used to supply	Source Protection Zone 1s and areas within 50 metres of boreholes (used to supply drinking water or water for food production) are designated sensitive areas which can be affected by pollution from SSDs, causing potential health risks. Because of this you need to apply for a permit if you want to make a new discharge in one of these areas so that the Environment

General binding rule	Explanatory Note
<p>water for drinking or food production (you must ask your neighbours for information on any private abstractions they may have).</p>	<p>Agency can check that it won't cause pollution, and will be properly controlled.</p>
<p>For new discharges, the owner must apply for a permit if the discharge is in, or within 50m of, a SAC, SPA or Ramsar site, biological SSSI, or biological and geological SSSI.</p>	<p>SACs, SPAs, Ramsar sites and SSSIs are designated sensitive areas which can be affected by pollution from SSDs. Because of this you need to apply for a permit if you want to make a new discharge in or near to one of these areas so that the Environment Agency can check that it won't cause pollution, and will be properly controlled.</p> <p>You can check whether you need a permit for your SSD by contacting the Environment Agency.</p>
<p>New discharges must not be within 30 metres of a public foul sewer.</p>	<p>It is important that new properties are connected to the public sewerage system whenever possible as the sewage will be treated to a much higher standard than it would through a private septic tank or package treatment plant.</p> <p>Therefore if any part of the property is within 30m of a public sewer we would not usually allow a new SSD, unless there are mitigating circumstances such as natural barriers (e.g. a river) or other constraints which would make connection to public foul sewer unfeasible. If in doubt you should contact the Environment Agency to discuss.</p>
<p>For new discharges, the owner must have obtained any necessary planning and building control approval for the treatment system.</p>	<p>This is to remind SSD owners of the need to ensure they have complied with the other legal requirements which control the use of small sewage treatment systems.</p>
<p>If a property is sold, the owner</p>	<p>If you sell your house, you should write a letter to</p>

General binding rule	Explanatory Note
<p>must give the new owner a written notice stating that a small sewage discharge is being carried on the land, and giving a description of the waste water system and its maintenance.</p>	<p>the new owner saying that the property has a small sewage discharge. You should also describe as far as you can the type of treatment system, location of the plant and its drainage field, and provide as much information on maintenance as you can, including a copy of the operation and maintenance manual for the plant if you have one.</p>
<p>The owner must ensure a system is appropriately decommissioned where it ceases to be in operation so that there is no risk of pollutants entering ground water or entering inland fresh waters or coastal waters.</p>	<p>If you no longer need to use your SSD e.g. because you connect to public foul sewer or the property is demolished, you should make sure anything that could cause pollution is removed such as any remaining sludge in the system.</p>

Annex 3 Designated Sensitive Areas

The Environment Agency determines the *designated sensitive areas* list in line with its duties and functions to conserve biodiversity under the following legislation:

- Conservation of Habitats and Species Regulations 2010
- Countryside and Rights of Way (CROW) Act 2000).
- Environment Act 1995
- Natural Environment and Rural Communities Act 2006 (Sections 41 (England) and 42 (Wales)),
- Wildlife and Countryside Act 1981

In relation to the Habitats Directive there is a specific reference to Environmental Permitting under EPR in Regulation 98 of the Habitats Regulation which makes it clear that the assessment requirements of Habitats Directive apply to permits under EPR.

Table A3.1 below explains the reasons for particular sensitive areas requiring a higher level of protection and prevention of pollution.

Table A3.1: Protected areas that will be retained on the designated sensitive areas list

Protected Areas	Reason for designation
Ground Source Protection Zone 1s (SPZ1s)	SPZ1s are declared to protect groundwater supplies which are used to provide water for human consumption. It is essential that SSDs in these areas are controlled to minimise the risks to human health.
SACs, SPAs and Ramsars	SACs (areas designated for importance to a variety of habitats and species), SPAs (areas designated for importance to birds) and Ramsars (designated wetlands of international importance) represent the best examples of habitats and species and are designated according to the European Union's Habitats Directive. We need to protect the integrity of these sites allowing them to sustain and support the species and habitats for which they are protected.

Protected Areas	Reason for designation
SSSIs (biological or biological and geological only)	<p>SSSIs are the country's very best wildlife and geological sites, designated to protect some of our rarest and most threatened wildlife and geology. They include unique features for which England holds a large proportion of the world total, such as our peat bogs, maritime heathlands and limestone pavements. As well their obvious value for wildlife and geology, SSSIs provide many benefits to individual people and society as a whole.</p> <p>There are over 4,100 Sites of Special Scientific Interest (SSSIs) in England, covering around 8% of the country's land area. SSSI's are legally protected under the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way (CROW) Act 2000 and the Natural Environment and Rural Communities (NERC) Act 2006.</p>
Designated bathing waters	These are areas where bacterial pollution from sewage and animal waste must be minimised in order to prevent, as far as possible, risks to the health of those bathing there.
Shellfish Protected Waters	These are areas where bacterial pollution from sewage and animal waste must be minimised in order to prevent, as far as possible, contamination of the shellfish which are grown there and therefore the risk to the health of people who then eat them.

Permitting

Permitting delivers a higher level of protection principally because of the scrutiny the Environment Agency makes on the permit applications. It allows the Environment Agency to take case by case judgements based upon risk assessments in sensitive areas, increasing regulatory control where it is needed to protect the environment.

As such the permitting process delivers:

- the UK governments' responsibilities under Groundwater Directive, the Water Framework Directive and the 2006 Groundwater Daughter Directive (as implemented by the Environmental Permitting Regulations 2010) to ensure the water environment is protected;
- the UK governments' responsibilities under the Habitats Directive to protect SACs, SPAs and government policy applying these standards to Ramsar sites; and
- a higher level of protection for the environment in sensitive areas by enabling the Environment Agency to assess the STP for its impact on the particular sensitive area near which or in which it is located.

If the proposals in this consultation are adopted, where permits are not required then the general binding rules will still provide protection to sensitive habitats areas and will include a rule that the discharge must not cause pollution of surface water or groundwater. Therefore, if an SSD is found to be causing pollution of a sensitive habitats area, the Environment Agency will require the operator to take the appropriate action, which may include applying for a permit so that the impact of the SSD can be more thoroughly assessed and controls placed on it if necessary.

Even well-maintained SSDs (covered by GBRs or permits) can have an effect on a sensitive area, particularly where there are clusters of SSDs (where the individual impact of each SSD might be quite low, but the combined emissions are giving rise to pollution, for example increasing phosphate levels). In these situations, reducing pollution from SSDs would be tackled over time through Diffuse Water Pollution Management Plans and other long term-strategies working with Natural England to reduce pollutants. Action may include managing pollution through sustainable drainage systems (SUDS), working with farmers to manage fertiliser use, promoting the use of low-phosphate detergents and encouraging applications for first-time sewerage schemes.

Annex 4 Evidence of need to prevent pollution from SSDs

The main pollution risks from small sewage treatment plants to **surface** waters⁹ are:

- 1) Eutrophication (a process where water bodies receive excess nutrients that stimulate excessive plant growth) of rivers and lakes through enrichment primarily with phosphate (caused by human waste) but also nitrate.
- 2) Reduction of dissolved oxygen levels through organic matter input and direct toxicity effects to aquatic life through ammonia toxicity.
- 3) Sanitary and nuisance issues.
- 4) Bacterial contamination in bathing waters and shellfish protected waters.
- 5) Contamination with other substances such as trace organics, metals and pharmaceuticals or oestrogenic substances.

The main pollution risks from septic tanks and small sewage treatment plants to **groundwaters**¹⁰ are:

- 1) Contamination of drinking water sources with bacteria
- 2) Ammonia and nitrate contamination
- 3) Contamination with other substances such as trace organics, metals and pharmaceuticals or oestrogenic substances.

Examples of evidence of pollution concerning drinking water failing to meet standards and the health risks from septic tanks and small sewage treatment plants include:

- Environment Agency records¹¹ show 21,588 substantiated pollution incidents since 2002 where the source was identified as domestic / residential. Of these, 6,698 incidents involved “sewage materials” as the primary pollutant. Of these, 1,441 incidents listed “septic tank or sewage treatment works” as the cause. “Overflowing septic tank”, “soakway blocked”, “septic tank discharge direct to watercourse”, “poo

⁹ Surface waters are inland fresh waters, coastal waters or relevant territorial waters.

¹⁰ Groundwaters means all water which is below the surface of the ground in the saturation zone and in direct contact with then ground or subsoil.

¹¹ Pollution incidents and Water Framework Directive Compliance records

maintenance” and “pump or motor failure” were identified as the most usual causes of those incidents.

- In 2012¹² the Environment Agency identified 167 distinct water bodies where one or more elements were at risk of not meeting Good Status¹³ due to ‘unsewered domestic sewage’ (which includes septic tanks and small sewage treatment plants).
- Contamination of raw public and private water supplies has been reported. For example in the groundwater Source Protection Zones between two villages in the East Riding of Yorkshire, Yorkshire Water has reported bacteria problems in the abstraction systems of these sources and have needed to treat the raw water to ensure that the pathogens are removed before it goes into supply. Septic tanks and small sewage treatment plants were also implicated as potential sources of the Cryptosporidium pathogen that caused 231 cases of the diarrhoeal illness cryptosporidiosis in North West Wales in 2005.
- A Drinking Water Inspectorate report showed that in 2012: 13% of the private water supplies tested failed the standards for E. coli and 13.4% failed for Enterococci, both of which are indicative of faecal contamination. The report also showed that 11.6% of private water supplies failed for nitrate, of which both agriculture and small sewage discharges are potential sources.

Examples of evidence of pollution in sensitive areas include:

- An Environment Agency review concluded that pathogen releases from septic tanks affected 8 of the 70 **bathing waters** projected not to meet the new minimum standard of the Bathing Waters Directive in 2015 in England and Wales contributing between 5 and 50% of the pathogen load.
- Lakes and ponds are particularly sensitive receptors to nutrient pollution including that from septic tanks and small sewage treatment plants. A Natural England assessment of sources of phosphorus and nitrogen showed that septic tanks were a contributing factor to the “unfavourable condition” at 13 Sites of Special Scientific Interest (SSSI). It was estimated that they accounted for between 1 and 52% of the phosphate and 3 and 35% of the nitrogen load at these sites.
- There is considerable evidence that septic tanks can cause pollution to sensitive wetlands. For example a study of the Norfolk Broads estimated that septic tanks contribute up to 86% of the measured phosphate content in rivers draining the sub catchments of the Broads.

¹² Extract from the Water Framework Directive 'Reasons for Failure' database (Environment Agency, 2012)

¹³ The EU [Water Framework Directive](#) requires member states to achieve good status for all water bodies

Annex 5 Registration scheme

The registration scheme for small sewage discharges was established in 2010 under the 2010 Environmental Permitting Regulations. By completing the registration people also agreed to abide by the requirements for managing their septic tank or small sewage treatment plant.

The registration scheme manages facilities that are exempt from routinely needing a permit. The registration criteria are listed in Tables A5.1 and A5.2 below. The registration scheme is currently suspended in England but those who wish to register their SSD (for example to enable a house sale) are still able to do so.

Description of the registration process

Registration can be done online or by post and needs to be done by the occupier of the property which the SSD serves. In order to register, the occupier needs to supply the following information:

- name and address
- the address of the property where the discharge is being made, including the post code and a National Grid Reference for the discharge (see below for details)
- whether the discharge is existing (before 6 April 2010) or new (after 6 April 2010)
- the type of sewage system (septic tank or package sewage treatment plant)
- the volume of the discharge
- whether the discharge is to the ground or to a suitable surface water
- for discharges to ground, to confirm that the discharge is not within 50 metres of a well, spring or borehole that is used to supply water
- to be confirm that the customer has read the relevant guidance and is fully aware of the criteria for registration

If registration is removed how will this affect customers?

The main difference will be that customers will no longer have to register their SSD by giving the Environment Agency the information above. Instead they will just have to make sure that they can comply with the general binding rules which will be published on the gov.uk website and will be available in hard copy on request. The *general binding rules* will be similar to the current registration criteria in that SSD owners will still be required to maintain their septic tanks or small sewage treatment plants to prevent pollution, however administrative burdens will be reduced such as the need to register and to keep records.

A distinction is made between **new** and **existing** discharges which helps identify whether a permit is required, or registration. **New** discharges are ones that have come into use after 6 April 2010 when the EPR 2010 came into force. **Existing** discharges are ones that were in operation before that date. Tables A5.1 & A5.2 give details of the criteria that apply. Under the proposals in this consultation then similar requirements will form the general binding rules (see Annex 2 for details). If the EPR 2010 are amended new discharges will date from when the amending regulations come into force.

Table A5.1 Criteria for Existing discharges – in use before 6 April 2010

All existing discharges to ground and surface water:
<ul style="list-style-type: none"> • The sewage must only be domestic • The system must be installed and operated in accordance with the manufacturer’s specification. Maintenance must be undertaken by someone who is competent. You must have a maintenance plan. Records (for example, maintenance, tank emptying and servicing receipts) must be kept for 5 years. You should pass any records on to the new occupier if you move house • Waste sludge from the system must be safely disposed of by an authorised person
Additional criteria for existing discharges to surface water:
<ul style="list-style-type: none"> • The discharge must not cause pollution of surface water or groundwater • The discharge must be 5 cubic metres or less per day in volume • In tidal waters, the discharge outlet must be below the low water mark
Additional criteria for existing discharges to ground via an infiltration system or drainage field:
<ul style="list-style-type: none"> • The sewage must receive treatment from a package sewage treatment plant • The discharge must be 2 cubic metres or less per day in volume • The discharge must be outside a groundwater Source Protection Zone 1 (we will check this for you) and be further than 50 metres from any well, spring or borehole that is used to supply water for domestic or food production purposes (you must ask your neighbours for information on any private abstractions they may have) • The sewage must receive adequate treatment via a septic tank and infiltration system / drainage field in accordance with the relevant British Standard requirements in force at the time of installation • There must be no discharge to surface water

Table A5.2 Criteria for New discharges – brought into use after 6 April 2010

All new discharges to ground and surface water:
<ul style="list-style-type: none"> • The sewage must only be domestic • The discharge must not be within 30 metres of a public foul sewer • The occupier must have obtained any necessary planning and building control approval for the treatment system • The system must be installed and operated in accordance with the

manufacturer's specification. Maintenance must be undertaken by someone who is competent. You must have a maintenance plan. Records (for example, maintenance, tank emptying and servicing receipts) must be kept for 5 years. You should pass any records on to the new occupier if you move house

- The system should be sized in accordance with British Water Code of Practice - Flows and Loads 3 (your installer will be able to confirm this)
- Waste sludge from the system must be safely disposed of by an authorised person
- The discharge must not cause pollution of surface water or groundwater

Additional criteria for new discharges to surface water:

- The discharge must be 5 cubic metres or less per day in volume
- The discharge must be made to a watercourse that normally contains water throughout the year. The discharge cannot be to an enclosed lake or pond
- The discharge must be more than 50 metres from a designated bathing water or shellfish protected water (we will check this for you)
- The discharge must be more than 500 metres from a designated European site, Ramsar site, Site of Special Scientific Interest (SSSI) or any locally identified protected site or species (we will check this for you)
- In tidal waters, the discharge outlet must be below the low water mark
- The sewage must receive treatment from a package sewage treatment plant. Any partial drainage field must be installed within 10 metres of the bank side of the watercourse

Additional criteria for new discharges to ground via an infiltration system or drainage field:

- The discharge must be 2 cubic metres or less per day in volume
- The discharge must be outside a groundwater Source Protection Zone 1 (we will check this for you) and be further than 50 metres from any well or borehole that is used to supply water (you must ask your neighbours for information on any private abstractions they may have)
- The discharge must be more than 50 metres from a designated European site, Ramsar site, Site of Special Scientific Interest (SSSI) or any locally identified protected site or species (we will check this for you)
- The sewage must receive adequate treatment via a septic tank and infiltration system / drainage field in accordance with the relevant British Standard (your installer will be able confirm this)
- The discharge outlet from the treatment system must be installed in accordance with the relevant British Standard (your installer will be able to confirm this)
- There must be no discharge to surface water