

# Application for an environmental permit

## Part B6.5 – Discharging treated domestic sewage effluent (no trade) of up to 15 cubic metres (15m<sup>3</sup>) a day into ground or up to 20 cubic metres (20m<sup>3</sup>) a day to surface water



**Please check that this is the latest version of the form available from our website.**

The form can be:

- 1 Saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.
- 2 Printed off and filled in by hand. Please write clearly in the answer spaces.

**You should only use this form if your intended activity is limited to discharging treated domestic sewage effluent (no trade effluent) of up to 15 cubic metres (15m<sup>3</sup>) a day to ground or up to 20 cubic metres (20m<sup>3</sup>) a day to surface water.**

**A discharge into the ground, is, for example, to a drainage area, onto land or into a borehole (provided the discharge only results in an indirect discharge to groundwater).**

**A discharge to surface water is, for example, to a river, stream, canal, lake, estuary or the sea.**

**If you want to carry out any other activities, fill in the appropriate parts of the EPR application form on the website.**

It will take less than two hours to fill in this form.

Where you see the term ‘document reference’ on the form, give the document references and send the documents with the application form when you’ve completed it.

Note: please read the guidance to this form before filling the form in.

**Contents**

- 1 About you
- 2 About this application
- 3 Your management system
- 4 Your site plan
- 5 About your discharge
- 6 Payment
- 7 The Data Protection Act 1998
- 8 Confidentiality and national security
- 9 Declaration
- 10 How to contact us
- 11 Where to send your application

Appendix 1 – Discharges to a river, stream, ditch or canal  
 Appendix 2 – Discharges into land (drainage field)  
 Appendix 3 – Discharges onto land  
 Appendix 4 – Discharges to a borehole or well  
 Appendix 5 – Discharges to tidal river, estuary or coastal waters  
 Appendix 6 – Discharges to a lake or pond

**Note: You will need to fill in one form for each sewage treatment facility you are applying for.**

### 1 About you

#### 1a Who will be named on the permit?

Please give us the following details of who you want to be named on the permit.

##### An individual or group or organisation of individuals

Please give the details of the individual or, where relevant for groups or organisations of individuals, the main representative.

Name

Title (Mr, Mrs, Miss and so on)

First name

Last name

##### Now complete your address at 1b

##### More than one individual

If more than one individual will be named on the permit the details for each additional individual required above along with their address required by 1b below must be provided together on a separate sheet, please tell us here the document reference you have given this sheet.

Document reference

##### An organisation (group) of individuals

Please give us the following details of the organisation of individuals.

Type of organisation

For example, a charity, a partnership, a group of individual householders or a club and so on.

## 1 About you, continued

### Name of organisation if relevant

For example the name of the charity, partnership or club  
and so on

### A company or corporate body

Name of the company

Company registration number

Date registered (DD/MM/YYYY)

If you are applying as a corporate organisation that is not a limited company, please provide evidence of your status and tell us below the reference number you have given the document containing this evidence.

Document reference

### Contact name for company

Title (Mr, Mrs, Miss and so on)

First name

Last name

### 1b Your address

For companies this is the address on record at Companies House.

Address

Postcode

Contact numbers, including the area code

Phone

Fax

Mobile

Email

### 1c Agent or others acting on behalf of the applicant

If you want us to contact an agent or another person not named above in 1a their details must be provided below. This can be someone acting as a consultant or an 'agent' for you.

Title (Mr, Mrs, Miss and so on)

First name

Last name

Position

Address

Postcode

## 1 About you, continued

Contact numbers, including the area code

Phone	<input type="text"/>
Fax	<input type="text"/>
Mobile	<input type="text"/>
Email	<input type="text"/>
	<input type="text"/>
	<input type="text"/>

Now fill in section 2

## 2 About this application

### 2a Have you spoken to us already about this application?

If you have had pre-application discussions with us before your application, please provide details on a separate sheet. Tell us below the reference you have given this sheet.

Document reference

### 2b About your sewage treatment facility

The term 'sewage treatment facility' is used throughout this application form. That term is explained in more detail in the guidance document that accompanies this application form.

Where is the sewage treatment facility? (name, address, postcode and national grid reference)

If the address is the same as given in answer to 1b tick this box, if not, enter the details below.

Site name

Address

Postcode

### 2c National Grid Reference for the centre of your sewage treatment facility

(for example, ST 12345 67890)

To find out the 12-digit grid reference search on the UK Grid Reference Finder website [www.gridreferencefinder.com](http://www.gridreferencefinder.com)

### 2d What type of activity are you applying for? (tick one)

A discharge to a surface water, for example a river, stream, canal, lake, estuary or the sea and so on (water discharge activity)

A discharge into the ground, for example a drainage area, onto land, a borehole and so on (groundwater activity)

### 2e Is your discharge new or existing?

New

Existing  When was it built?

(date in format DD/MM/YYYY if known, or estimate)

Now fill in section 3

## 3 Your management system (see guidance note to part B6.5)

You must have a written management system to make sure that your sewage treatment facility is maintained and run effectively. Your permit requires you (as the operator) to ensure that you manage and operate your activities in accordance with a written management system.

You can find guidance on management systems in the guidance notes to part B6.5 and on our website at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency).

Tick this box to confirm that you have read the application form guidance and that your management system will meet our requirements.

Now fill in section 4

## 4 Your site plan

You must provide a plan for your sewage treatment facility as part of your application.

**PLEASE NOTE THAT WE ARE UNABLE TO PROCESS YOUR APPLICATION WITHOUT YOUR PLAN. IF YOU DO NOT PROVIDE ONE WE WILL RETURN THE APPLICATION TO YOU.**

For discharging sewage to a receiving surface water, your plan must show the sewage treatment plant, and the point where the sewage is discharged to the receiving surface water. For discharging sewage to ground, your plan must show the sewage treatment plant and how the sewage is discharged to the ground (for example, the drainage field, borehole or wetland area and so on).

Any sample point identified in answer to 5f below should also be shown

The properties served by the facility are not part of the facility and do not have to be shown.

Please give the plan a reference number and write it below.

Document reference of the plan

Now fill in section 5

## 5 About your discharge

5a What type of premises does your sewage treatment facility serve, for example the number of houses or a description such as a pub, café, restaurant, office and so on

5b What is the maximum volume of effluent you will discharge in a day (in cubic metres)?

**If your discharge comes from a single domestic property, use the table below to work this out.**

Number of bedrooms in your house	Daily volume (cubic metres per day)
1 to 3	0.75
4 to 6	1.2
7 to 8	1.5

**How to calculate the maximum daily discharge volume from multiple domestic properties**

If you are discharging sewage from premises other than a single domestic property (for example, from a group of houses, a guest house or a very large house), the volume should be worked out using the industry code of practice known as 'Flows and Loads – 4', which is available from the British Water at [www.britishwater.co.uk](http://www.britishwater.co.uk) (To help you calculate this, we recommend you read the guidance notes on part B6.5 for more information)

**Show how you calculated the figure given in the box below and continue on a separate sheet if necessary, giving a reference for the extra sheet.**

Document reference for any extra sheet(s) used for question 5b

5c Could your discharge be made to the foul sewer?

Foul sewer means public or private foul sewer

**Before completing questions 5c and 5d, you must read the guidance notes that support this form. You will also need to contact your sewerage undertaker (usually your local water company) and you may also need to check if it is possible to connect to a private foul sewer.**

How far away is the nearest foul sewer from the boundary of the premises (in metres)?

5d To assess if it is reasonable to discharge your effluent into the foul sewer:

**Discharges from domestic properties**

Multiply the number of properties served by the sewage treatment system by 30 metres.

Number of domestic properties served by the sewage treatment system

x 30 metres = Answer

metres

## 5 About your discharge, continued

### Discharges from all other premises, for example a pub, cafe, restaurant or office

Divide the volume of the discharge (in cubic metres) by 0.75 and then multiply this figure by 30 metres.

Volume of the discharge  cubic metres / 0.75 =  x 30 = Answer  metres

Is your answer to either question 5d above greater than the distance to the nearest foul sewer (answer to 5c)?

No

If no, you do not need to explain why you cannot discharge your effluent into the foul sewer at this point. However we may request this information from you when we determine your application.

Yes

If yes, you must explain why you cannot discharge your effluent into the foul sewer on a separate sheet giving a reference for the extra sheet. Before you submit the application, you must explore the possibility of connecting to the foul sewer, and send us evidence that you have approached the sewerage undertaker, including their formal response regarding connection, if relevant. You must also show the extra cost of connecting to a sewer compared to the treatment system you propose, and details of any physical obstacles for example roads, railways, rivers or canals.

We will only agree to the use of private treatment systems within sewered areas if you can demonstrate that:

- the additional cost of connecting to the foul sewer would be unreasonable;
- connection is not practically feasible; or
- the proposed private treatment system can be shown to significantly benefit the environment.

**We are unlikely to grant a permit for a discharge of treated domestic sewage in circumstances where a private sewerage system is being proposed due to a lack of capacity in the nearest public sewerage network.**

The guidance document which supports this application will help you understand what information you need to provide in order to answer this question.

Document reference where you have given this justification

### 5e What type of sewage treatment system will you be using to treat your effluent?

Package treatment plant that meets British Standard BS 12566

Septic tank

Other

You must provide design details of 'other' treatment including the stages of treatment carried out on your effluent and the final effluent discharge quality that the treatment system is designed to achieve. Provide this information in the box below and continue on a separate sheet if necessary, giving a reference for the extra sheet.

Document reference for any extra sheet(s) used for question 5e

**5f** You must provide a sample point where a sample of your discharge can be safely taken before it has mixed with any other discharges such as rainwater run off if you are making:

- an existing or new discharge to surface water
- an existing discharge to groundwater and the volume is more than 5 cubic metres (5m<sup>3</sup>) a day
- a new discharge to groundwater.

This does not apply if you are discharging to ground up to 5 cubic metres (5m<sup>3</sup>) a day from an existing system. If your sample point is not at your outlet you must give its grid reference and identify it on the plan required by section 4.

What is the National Grid Reference of your discharge sample point if not at the outlet (for example, ST 12345 67890)

### 5g Where will your treated effluent discharge to?

Mark in the table below where this effluent discharges to and fill in the relevant appendix in terms of the information required.

## 5 About your discharge, continued

If you are sending in a paper version of this form you only need to print off and fill in one appendix to save on paper.

Receiving environment	X	Relevant appendix
River, stream, ditch or canal		1
Into land (drainage field)		2
Onto land (e.g. via reed bed or grass plot)		3
Borehole or well or other deep structure		4
Tidal river, tidal stream, estuary or coastal waters		5
Lake or pond		6

### 5h Risk assessment requirements

A risk assessment must be undertaken in order to determine whether your proposed discharge is environmentally acceptable. For most discharges applicable to this application form, we will undertake a risk assessment for you. You must however provide sufficient information as required by this application form in order for us to carry out the risk assessment on your behalf. This is particularly important where an application to discharge to a borehole or other deep structure is concerned (see appendix 4).

If however you are proposing a new discharge of treated domestic effluent to ground via a shallow sub-surface infiltration system in a groundwater source protection zone 1 (SPZ1) with a discharge volume between 2 to 15 cubic metres a day, you must carry out a groundwater quantitative risk assessment following the guidance (search for 'Groundwater risk assessment for your environmental permit' at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)). You must send us details of how the risk assessment / modelling was carried out and the outcome. See the web guidance for details of how you can find out if your proposed discharge is in a SPZ1.

If your discharge of treated domestic effluent is to ground and outside a SPZ1 with a discharge volume between 2 to 15 cubic metres a day and is existing, you do not need to submit a quantitative risk assessment at this point. However we may request this information from you when we determine your application.

YOU MUST ONLY ANSWER THIS QUESTION IF YOUR PROPOSED DISCHARGE IS TO GROUND

Are you required to submit a quantitative risk assessment as detailed above?

No  My proposed discharge does not require me to submit a separate quantitative risk assessment but to provide sufficient information as required by this application form to allow the risk assessment to be undertaken on my behalf

Yes  My proposed discharge requires me to submit a quantitative risk assessment as detailed above.

If you answered yes, please give document reference for your risk assessment report: \_\_\_\_\_

## 6 Payment

6a Are you a domestic household or an organisation operating for charitable purposes and is the maximum volume of effluent you will discharge five cubic metres (5m<sup>3</sup>) or less a day?

This is the figure you have given in question 5b.

Yes  A reduced application and subsistence charge applies.

No

Please see 'Environment Agency charging scheme and guidance: environmental permits, licence and registration costs and fees' at <https://www.gov.uk/government/publications/environmental-permitting-ep-charges-scheme-april-2014-to-march-2015> or contact us using one of the options in section 10, for details of the current application fees. Please note that the charges are revised on 1 April each year.

Now fill in questions 6b to 6g.

6b Who can we contact about your billing or invoice?

Details as in question 1a and 1b

Details as in question 1c

Please give details below if different from question 1a and 1b or 1c.

Title (Mr, Mrs, Miss and so on) \_\_\_\_\_

First name \_\_\_\_\_

Last name \_\_\_\_\_

Position \_\_\_\_\_

## 6 Payment, continued

Address

Postcode

Contact numbers, including the area code

Phone

Fax

Mobile

Email

6c What date do you want the permit for this effluent to start?  
(DD/MM/YYYY)

Please note that this is the date that your annual subsistence charges will start, even if you have not started to discharge, unless you contact us to change (delay) the start date.

6d Is the discharge time limited?

Yes  Please give the date you expect the discharge to end  
(DD/MM/YYYY)

Please note that your permit will not end on that date and you will still need to notify us to surrender the permit.

No

6e Will the discharge take place all year?

Yes

No  Please give details of the months when you will make  
the discharge

6f Will the discharge take place on more than six days in any year?

Yes

No

6g Tick below to show how you will make the payment.

Cheque

Postal order

Cash

Credit or debit card

Electronic transfer (for example, BACS)

We do not recommend sending cash through the post. If you cannot avoid this, please use a recorded-delivery postal service and enclose your application reference details.

### Paying by credit or debit card

If you are paying by credit or debit card, either we can call you or you can fill in the separate form CC1 and enclose it with the application. We will destroy your card details once we have processed your payment. We can accept payments by Visa, MasterCard or Maestro card only.

Please call me to arrange payment by credit or debit card

I have enclosed form CC1 with my application

### Paying by electronic transfer BACS reference

Company name Environment Agency

Company address SSCL (Environment Agency), PO Box 797, Newport Gwent, NP10 8FZ

Bank RBS/Nat West

Address London Corporate Service Centre, CPB Services, 2nd Floor, 280 Bishopsgate, London EC2M 4RB

Sort code 60-70-80



Account number 10014411  
Account name EA RECEIPTS  
Payment reference number PSCAPPXXXXYYY

You need to create your own reference number. It should begin with PSCAPP (to reflect that the application is for a permitted activity) and it should include the first five letters of the company name (replacing the Xs in the above reference number) and a unique numerical identifier (replacing the Ys in the above reference number). The reference number that you supply will appear on our bank statements.

You should also email your payment details and reference number:

Remittance email ea\_fsc\_ar@sscl.gse.gov.uk

## **7 The Data Protection Act 1998**

We, the Environment Agency, will process the information you provide so that we can:

- deal with your application;
- make sure you keep to the conditions of the licence, permit or registration;
- process renewals; and
- keep the public registers up to date.

We may also process or release the information to:

- offer you documents or services relating to environmental matters;
- consult the public, public organisations and other organisations (for example, the Health and Safety Executive, local authorities, the emergency services, the Department for Environment, Food and Rural Affairs) on environmental issues;
- carry out research and development work on environmental issues;
- provide information from the public register to anyone who asks;
- prevent anyone from breaking environmental law, investigate cases where environmental law may have been broken, and take any action that is needed;
- assess whether customers are satisfied with our service, and to improve our service; and
- respond to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 (if the Data Protection Act allows).

We may pass the information on to our agents or representatives to do these things for us.

**Now read section 8 below**

## **8 Confidentiality and national security**

### **Confidentiality**

We will normally put all the information in your application on a public register of environmental information. However, we may not include certain information in the public register if this is in the interests of national security, or because the information is confidential (see the guidance accompanying this form which explains what we mean by confidentiality).

You can ask for information to be made confidential by ticking the box below and enclosing a letter with your application giving your reasons (see the guidance accompanying this form which explains what we mean by confidentiality). If we agree with your request, we will tell you and not include the information in the public register. If we do not agree with your request, we will let you know how to appeal against our decision, or you can withdraw your application.

Confidentiality is unlikely to be applicable for a small-scale sewage discharge except for information about ex-directory telephone numbers. In those cases please write to tell us that information should not go on the public register.

**Only tick the box below if you wish to claim confidentiality for your application and have enclosed a letter stating your reasons. We will then have to assess your statement and therefore the progress of your application may take longer.**

Please treat the information in my application as confidential.

### **National security**

You can tell the Secretary of State that you believe including information on a public register would not be in the interests of national security. You must enclose a letter with your application telling us that you have told the Secretary of State and you must still include the information in your application. We will not include the information in the public register unless the Secretary of State decides that it should be included.

You can find guidance on national security in 'Environmental permitting guidance: core guidance', published by Defra and available at gov.uk.

You cannot apply for national security via this application.

**Now fill in section 9**



## 9 Declaration

Each individual who is applying for their name to appear on the permit must complete this declaration. You will have to print a separate copy of this page for each additional individual to complete.

If you knowingly or carelessly make a statement that is false or misleading to help you get an environmental permit (for yourself or anyone else), you may be committing an offence under the Environmental Permitting (England and Wales) Regulations 2010.

A relevant person should make the declaration (see guidance notes on part B6.5). An agent acting on behalf of an applicant is NOT a relevant person.

I declare that the information in this application is true to the best of my knowledge and belief. I understand that this application may be refused or approval withdrawn if I give false or incomplete information.

If you deliberately make a statement that is false or misleading in order to get approval you may be prosecuted.

You must tick this box to confirm that you understand and agree with the declaration above, then fill in the details below (you do not have to provide a signature as well).

Name \_\_\_\_\_

Title (Mr, Mrs, Miss and so on) \_\_\_\_\_

First name \_\_\_\_\_

Last name \_\_\_\_\_

On behalf of (for example, if applying on behalf of a company – see guidance to this form) \_\_\_\_\_

Position (if relevant, for example, in a company or organisation and so on) \_\_\_\_\_

Today's date (DD/MM/YYYY) \_\_\_\_\_

## 10 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422549 (Monday to Friday, 8am to 6pm)

Email: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

Website: [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, or you would like us to review a decision we have made, please let us know. More information on how to do this is available at: <https://www.gov.uk/government/organisations/environment-agency/about/complaints-procedure>.

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

## 11 Where to send your application (one copy of the application and each supporting document provided)

If your application is not complete we will return it to you. If you aren't sure about what you need to send, speak to us before you submit your application.

You must do the following:

- Complete legibly all parts of this form that are relevant to you and your activities
- Identify relevant supporting information in the form and send it with the application
- Provide a plan that meets the standards given in the guidance note on part B6.5
- Provide a supporting letter for any claim that information is confidential
- Get the declaration completed by a relevant person (not an agent)
- Send the correct fee

## 11 Where to send your application (one copy of the application and each supporting document provided), continued

Please send your filled-in application form to:

Email: PSC-WaterQuality@environment-agency.gov.uk

Or

Environment Agency Permitting and Support Centre

Environmental Permitting Team

Quadrant 2

99 Parkway Avenue

Parkway Business Park

Sheffield

S9 4WF

### Do you want all information to be sent to you by email?

Please tick this box if you wish to have all communication about this application sent via email

(we will use the details provided in Part A).

## Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form?

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please

No thank you

### For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No

Yes

Amount received

£

## Plain English Campaign's Crystal Mark does not apply to appendices 1 to 6.

### Appendix 1 – Discharges to a river, stream, ditch or canal

If you are discharging to a river, stream, ditch or canal, you must answer questions 1.1 to 1.6 below.

1.1 Give the National Grid Reference of the discharge point  
(for example, ST 12345 67890) \_\_\_\_\_

1.2 Give the name of the watercourse, canal or the main  
watercourse it is a tributary of if you know it \_\_\_\_\_

1.3 Is the discharge into a  
(tick one)

River, stream or ditch

Canal

1.4 Does the watercourse dry up for part of the year?

No

Yes  Do you agree to install 10 metres of perforated  
pipe work before the discharge point?

Yes

No

1.5 Does the discharge reach the watercourse or canal by flowing through a surface water sewer?

Yes  Go to 1.6

No

1.6 Give the National Grid Reference where the discharge enters  
the surface water sewer \_\_\_\_\_

## Appendix 2 – Discharges into land (drainage field)

If you are discharging the effluent into land, you must answer the relevant questions below.

2.1 Give the National Grid Reference of the discharge point   
(for example, ST 12345 67890)

2.2 Is your infiltration system new or existing?

New  Now go to question 2.4

Existing  Now go to question 2.3

2.3 When was it built?

Now answer questions 2.4–2.7 if you are able to. If not go straight to 2.8.

2.4 Is your infiltration system designed and built to British Standards 6297:2007 + A1:2008 or the British Standards in force at the time of installation?

Yes

No

2.5 On what date did you carry out a percolation test and dig a trial hole in line with British Standards 6297:2007 + A1:2008?

Date (DD/MM/YYYY)

2.6 What is your percolation value (Vp) result (in seconds per millimetre)?

You must show in the table below how you worked out the percolation value. Please also provide your test sheets and any field notes or observations made regarding ground conditions.

	Trial 1	Trial 2	Trial 3	Average
Hole 1				
Hole 2				
Hole 3				
Hole 4				

2.7 Please show us how you have calculated the area (A) of your infiltration system (in square metres).

p  × Vp  × 0.25 for septic tanks = A

or  
p  × Vp  × 0.20 for package treatment plants = A

p Population based on maximum occupancy

Vp Percolation value in seconds/mm.

2.8 If known, mark on the plan you have provided in response to section 4 the extent of the infiltration system. Please write on the plan the length and width of the sides in metres.

2.9 Is any part of your infiltration system within 50 metres of a well, spring or borehole?

Yes

No

Identify the location of the well, spring or borehole on the plan you have provided for section 4 and answer question 2.10.

2.10 Is the well, spring or borehole you have identified used to supply water?

Yes

No

You must describe in the space below what the water supplied is used for.

2.11 Is any part of your infiltration system within 10 metres of a watercourse?

Yes

No

Identify the location of the watercourse on the plan you have provided for section 4 of the application form.

### Appendix 3 – Discharges onto land

If you are discharging the effluent onto land, you must answer questions 3.1 to 3.6 below.

3.1 Give the National Grid Reference of the discharge point \_\_\_\_\_  
(for example, ST 12345 67890)

3.2 Select from the table below the type of area where the effluent is disposed of

Area type	X
Unlined reed bed	
Unlined grass plot	
Unlined wetland	
Other (please specify below)	

3.3 What is the surface area (in square metres) of the land used for your disposal? \_\_\_\_\_

3.4 Is any part of your discharge within 50 metres of a well, spring or borehole?

Yes

No

Identify the location of the well, spring or borehole on the plan you have provided and answer question 3.5

3.5 Is the well, spring or borehole you have identified used to supply water?

Yes

No

You must describe in the space below what the water supplied is used for.

3.6 Is any part of your infiltration system within 10 metres of a watercourse?

Yes

No

Identify the location of the watercourse on the plan you have provided for section 4 of the application form.

## Appendix 4 – Discharges to a borehole or well (or other deep structure)

If you are discharging the effluent to a borehole or well or other deep structure (such as a shaft, natural swallow hole or deep soakage pit), we will undertake a groundwater quantitative risk assessment on your behalf in line with the guidance (search for ‘Groundwater risk assessment for your environmental permit’ at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency)). You must ensure that the discharge is indirect to groundwater. Direct discharges to groundwater cannot be permitted.

For us to do this you must answer the following questions relevant to your application, and provide us with additional information as summarised in Table 4A below.

Without this information we will be unable to complete the risk assessment and it is likely your application will be rejected.

4.1 Give the National Grid Reference of the discharge point (for example, ST 12345 67890) \_\_\_\_\_

4.2 Is the discharge to ground via a well or a borehole?

Well

Borehole

Other deep structure

If you have ticked the box for ‘other deep structure’ please give details (e.g. concrete ring structure, shaft, natural swallow hole, soakage pit etc).  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4.3 What is the diameter (in metres) of the borehole, well or other deep structure that the effluent will be discharged into? \_\_\_\_\_

4.4 Is the borehole or well or other structure already constructed?

Yes  Please now answer questions 4.5 to 4.8

No  Please now answer questions 4.9 to 4.11

### Existing borehole, well or other deep structure

4.5 What is the total depth to the bottom of the existing well, borehole or other structure (in metres below ground level)? \_\_\_\_\_

If you do not know the actual depth, please estimate it based on the following categories:

0-5m

5-10m

Greater than 10m

Uncertain

What evidence is the estimated depth above based on? \_\_\_\_\_

4.6 Does the well, borehole or other structure always contain standing water or is water present occasionally?

Yes - always contains water

Sometimes - water is present occasionally

No - never contains water

If groundwater is always, or sometimes, present, please tell us what the highest level is that the standing water reaches (in metres below ground level)?

\_\_\_\_\_ Measured / estimated (delete as appropriate)

4.7 If you have any records, diagrams or borehole logs which could help us understand:

- the method of construction (including any solid casings or linings used)
- the likely depth of the deep structure
- the local groundwater conditions

please provide photocopies where possible. If this is not possible (for example, if the documents are large or bulky) please summarise any additional information you have on a separate sheet.

Document reference for these details \_\_\_\_\_

**Appendix 4 – Discharges to a borehole or well (or other deep structure), continued**

4.8 Please tell us about any maintenance that has been carried out on your well, borehole or other deep structure, for example, to aid effective drainage.

Please now answer question 4.12.

**Proposed borehole, well or other deep structure which has not yet been constructed**

4.9 Please tell us why you are unable to install a shallow engineered drainage system: this information forms an important part of our permit determination process. Which methods of shallow disposal have you considered and why were these considered unfeasible to take forward? Please answer questions 4.9 a and b below to provide the results of soakage tests and summarise in the box below any relevant information which supports your decisions e.g. permission refusals from land owners or physical constraints, or e.g. land availability or proximity to buildings.

a. What was your percolation value (Vp) result (in seconds per millimetre)? \_\_\_\_\_

You must show in the table below how you worked out the percolation value.

	Trial 1	Trial 2	Trial 3	Average
Hole 1				
Hole 2				
Hole 3				
Hole 4				

b. If a shallow engineered drainage system were feasible, what would be the required surface area of your infiltration system (in square metres)? \_\_\_\_\_

You can include any supporting information in relation to why you are unable to install a shallow-engineered drainage system with your application.

Document reference for these details \_\_\_\_\_

4.10 Please tell us the type of deep structure (for example, borehole, well, deep soakage pit) you propose to install and what the total depth will be in metres below ground level.



## Appendix 4 – Discharges to a borehole or well (or other deep structure), continued

4.11 Please tell us the reason this depth has been selected and, if you are aware of any relevant existing information on local water levels, please also tell us the depth to groundwater (in metres below ground level). What measures will you undertake to ensure the discharge is not directly into groundwater? If the discharge will be direct to groundwater explain why you cannot make it indirect. Direct discharges to groundwater cannot be permitted.

### Proximity of your discharge to other receptors

4.12 Is the borehole, well or other deep structure where the discharge is being / will be made within 50 metres of any other well, spring or borehole used to supply water for drinking water or food production purposes?

Yes  Please now answer question 4.13

No  Please now answer question 4.14

If yes, please show the location of the well spring or borehole you identified in answer to question 4.12 on the plan you have provided for Section 4 of the main application form.

4.13 Please tell us about the water supply (or supplies) used for drinking water or food production purposes identified in question 4.12 above e.g. the name of the property or properties served by the water supply, what they use the water for (drinking water, food production) and where they are in relation to your discharge.

4.14 Please tell us the distance in metres to the nearest watercourse (e.g. surface water, river, stream or ditch)

Please tell us whether you have considered discharging to surface water and why this is not feasible.

**Appendix 4 – Discharges to a borehole or well (or other deep structure), continued**

Please fill in Table 4A below.

Without this information we will be unable to carry out a hydrogeological risk assessment on your behalf.

Table 4A summarises the information which is required to allow us to undertake a hydrogeological risk assessment of your discharge to a deep infiltration system – without this information your application will be rejected. You will already have provided some of this information earlier in this application form. We also need you to provide additional information indicated by a tick (✓) in Table 4A. To find out what further information is required please search for ‘Groundwater risk assessment for your environmental permit’ at [www.gov.uk/government/organisations/environment-agency](http://www.gov.uk/government/organisations/environment-agency). You may require the advice of an environmental consultant to collate this information.

For some of the risk assessment inputs we are better placed to provide the information and will do so for those parameters indicated by an asterisk (\*) as far as possible. However, if you wish to provide site specific information for those parameters with an asterisk you are welcome to do so.

**Table 4A: Further information required to complete a groundwater quantitative risk assessment on your behalf**

Information	Description	Existing Structure	Proposed Structure	Information Supplied?
<b>Information supplied by the applicant – this has already been requested earlier in the application form</b>				<b>Information you have already supplied on the application form.</b>
National grid reference of the discharge point.		Question 2c	Question 2c	
Volume of effluent (in m <sup>3</sup> /day)		Question 5d	Question 5d	
Type of effluent treatment	Septic Tank, Package Treatment Plant, Other	Question 5e	Question 5e	
Type of Deep Infiltration System	Borehole, Well, Concrete ring structure, other	Appendix 4 Q 4.2	Appendix 4 Q 4.2	
Diameter of Deep Infiltration System (in m)		Appendix 4 Q 4.3	Appendix 4 Q 4.3	
Depth to the base of Deep Infiltration Structure (in m)		Appendix 4 Q 4.5	Appendix 4 Q 4.10	
Depth to Water Table (in m)	Is discharge above or below water table?	Appendix 4 Q 4.6 & Q4.7	Appendix 4 Q 4.11	
Justification for a Deep Infiltration System	Why are you unable to install a shallow infiltration system? What other options for disposal have been considered? Provide full details of the infiltration tests undertaken plus results.	Appendix 4 Q 4.7 – if available	Appendix 4 Q 4.9	
<b>Information supplied by the applicant – this is additional information we need you to provide that is not covered elsewhere on the application form. Site data should be provided where it is already available, if not then relevant literature values can be submitted with the source of the data and justification of the values selected quoted.</b>				

Table continues on next page

**Appendix 4 – Discharges to a borehole or well (or other deep structure), continued**

Concentration of relevant substances entering the infiltration system	For discharges of domestic effluent we will routinely assess the concentration of Nitrogen species, particularly the ammonium concentration.	✓	✓	<input type="checkbox"/>	<b>Tick to confirm you have provided this essential information</b>
Length of screened borehole section below the water table (in m)	Depth in metres of the borehole screened section which is below the water table. This only applies to boreholes which have groundwater in the base)	✓	✓	<input type="checkbox"/>	
Calculated area of infiltration system (in m <sup>2</sup> )	Explain how the area of the infiltration system has been calculated – this is especially relevant if a non circular system is used.	✓	✓	<input type="checkbox"/>	
Unsaturated Zone Parameters	These represents the strata above the water table <ul style="list-style-type: none"> <li>• Hydraulic Conductivity (as m/day)</li> <li>• Water Filled Porosity (as a %)</li> <li>• Bulk Density (as g/cm<sup>3</sup>)</li> </ul>	✓	✓	<input type="checkbox"/>	
Saturated Zone Parameters	These represents the strata below the water table <ul style="list-style-type: none"> <li>• Hydraulic Conductivity (as m/day)</li> <li>• Water Filled Porosity (as a %)</li> <li>• Bulk Density (as g/cm<sup>3</sup>)</li> <li>• Hydraulic gradient of the water table (as a fraction)</li> </ul>	✓	✓	<input type="checkbox"/>	
<b>Information provided by the Environment Agency where possible</b> – you are free to provide this information if you wish, or in some specific cases we may need to ask for this at a later stage.					<b>Tick to show if provided (optional)</b>
Environmental Standard	The relevant environmental standard or compliance value against which we will assess your effluent discharge.	*	*	<input type="checkbox"/>	
Half life for degradation of the substance (in days)	<b>If you wish to know more about these parameters please see ‘Groundwater risk assessment for your environmental permit’ at <a href="http://www.gov.uk/government/organisations/environment-agency">www.gov.uk/government/organisations/environment-agency</a>.</b>	*	*	<input type="checkbox"/>	
Soil water partition coefficient (in litres/kg)		*	*	<input type="checkbox"/>	
Mixing zone thickness (in m)		*	*	<input type="checkbox"/>	
Distance to compliance point (in m)		*	*	<input type="checkbox"/>	

## Appendix 5 – Discharges to tidal river, tidal stream, estuary or coastal waters

If you are discharging the effluent to tidal waters, you must answer questions 5.1 to 5.6 below.

5.1 Give the National Grid Reference of the discharge point  
(for example, ST 12345 67890) \_\_\_\_\_

5.2 Give the name of the tidal river, tidal stream, estuary or area  
of coastal water if you know it \_\_\_\_\_

5.3 Is the discharge into a  
(tick one)

Tidal river

Tidal stream

Estuary

Coastal water

5.4 Is the discharge point above the mean low water spring tide mark?

Yes

No

Please explain, in the box below, why the discharge cannot be made below this point and continue on a separate sheet if necessary, giving a reference for the extra sheet.

Document reference for any extra sheet(s) used for question 5.4 \_\_\_\_\_

5.5 Does the discharge reach the tidal river, tidal stream, estuary or area of coastal water by flowing through a surface water sewer?

Yes  Now go to question 5.6

No

5.6 Give the National Grid Reference where the discharge  
enters the surface water sewer (for example, ST 12345 67890) \_\_\_\_\_

## Appendix 6 – Discharges to a lake or pond

If you are discharging the effluent to a lake or pond, you must answer questions 6.1 to 6.6 below

6.1 Give the National Grid Reference of the discharge point \_\_\_\_\_

(for example, ST 12345 67890)

6.2 Give the name of the lake or pond if you know it \_\_\_\_\_

6.3 Select from the following table the type of lake or pond you will be discharging to and answer the relevant questions

Type of lake or pond	X	Relevant question(s)
Lake or pond that does not discharge into a river or watercourse or another pond that then discharges into a river or a watercourse		Permit not required*
Lake or pond that does not discharge into a river or watercourse or another pond that then discharges into a river or a watercourse, where you have had a notice served under paragraph 5 of Schedule 21 of the Environmental Permitting (England and Wales) Regulations 2010		6.4, 6.5
Lake or pond that discharges into a river or watercourse		6.4, 6.5, 6.6

\*Unless a notice has been served under Schedule 21 of the Environmental Permitting (England and Wales) Regulations 2010

6.4 What is the surface area of the lake or pond in square metres? \_\_\_\_\_

6.5 What is the maximum depth of the lake or pond in metres? \_\_\_\_\_

6.6 What is the average depth of the lake or pond in metres? \_\_\_\_\_