

Application for an environmental permit Part B6 – New bespoke water discharge activity and groundwater (point source) activity



Fill in this part of the form, together with parts A, B2 and F2, if you are applying for a new bespoke permit for a water discharge activity or a point source discharge groundwater activity. Please check that this is the latest version of the form available from our website.

Please read through this form and the guidance notes that came with it. Please write clearly in the answer spaces.

If you want to apply for a standalone discharge of treated domestic sewage effluent of up to fifteen cubic metres (15m³) a day to ground or up to twenty cubic metres (20m³) a day to surface water, please fill in form B6.5.

This form is on the website at www.environment-agency.gov.uk/business/topics/permitting/32318.aspx

It will take less than three hours to fill in this part of the application form.

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About the effluent – details and type

From the list below, choose which type of effluent you are applying for on this form and answer the questions shown in Table 1.

You must fill in a separate copy of this form and the appropriate appendix or appendices for each type of effluent you plan to discharge.

Table 1 – About the effluent

Type of effluent	Please tick box	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11
Domestic sewage – up to 20 m ³ a day discharged to surface water or – up to 15 m ³ a day discharged to groundwater	<input type="checkbox"/>	All	a, b, c, d	a, b	b, f	–	All	–	b, f*, g	–	–	All
Domestic sewage – 20 m ³ a day or more discharged to surface water or – 15 m ³ a day or more discharged to groundwater	<input type="checkbox"/>	All	a, b, c, d	a, b	b, f	–	All	b, d, e	b, d*, e*, f*, g	All	b, c, d, e	All
Intermittent settled storm sewage	<input type="checkbox"/>	All	a, b	–	–	a, b, e, f, g, h, l, m	All	a, d, e	b, g	All	a, b, c, d, e	All
Intermittent combined sewer overflow	<input type="checkbox"/>	All	a, b	–	–	c, d, e, f, g, h, i, m	All	a, d, e	b, g	All	a, b, c, d, e	All
Intermittent emergency overflow	<input type="checkbox"/>	All	a, b	–	–	j, k, l	All	a, d, e	b, g	All	a, b, c, d, e	All
Sewage – water company WwTW final effluent	<input type="checkbox"/>	All	a, b	–	a, f (b is optional)	–	All	a, b, c, d, e	a, b, c, d*, e*, f*, g (See note below)	All	a, b, c, d, e	All
Trade – known volume	<input type="checkbox"/>	All	a, b, c, d	a, b	b, c, f	–	All	b, c, d, e, f	b, d*, e*, f*, g (See note below)	All	b, c, d, e	All
Trade – rainfall dependent	<input type="checkbox"/>	All	a, b	–	b, c, f	–	All	b, c, d, e	b, d*, e*, f*, g (See note below)	All	b, c, d, e	All
Trade – returned abstracted water (including ground source heating and cooling schemes)	<input type="checkbox"/>	All	a, b, c, d	–	b, c, f	–	All	b, c, d, e, f, g	a, b, d*, e*, f*, g (See note below)	All	b, c, d, e	All
Mixed effluent – all effluent volumes	<input type="checkbox"/>	All	a, b, c, d	a, b	b, c, f	–	All	b*, d*, e* (See note below)	b, d*, e*, f*, g (See note below)	All	b, c, d, e	All
Mixed effluent – containing any rainfall dependent effluent	<input type="checkbox"/>	All	a, b	a, b	b, c, d, e, f	–	All	b, c, d, e, f	b, d*, e*, f*, g (See note below)	All	b, c, d, e	All

*Check the relevant question and our guidance notes on part B6 to see if you need to give an answer.

1 About the effluent – details and type

1a Give a brief description of the effluent discharge you want a permit for, for example, treated domestic sewage effluent

1b Give this effluent a unique name

You must use this name to identify this effluent throughout this application and all associated documents.

Name

1c Please tick if this is a release from a dam, weir or sluice ('reservoir release') under Schedule 21 of the EPR meaning of water discharge activity.

2 About the effluent – how long will you need to discharge the effluent for?

2a 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.

2b Is the discharge time limited?

Yes Please give the date you expect the discharge to end but please note that your permit will not end on that date and you will still need to notify us to surrender the permit (DD/MM/YYYY)

No

2c Will the discharge take place all year?

Yes

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

2d Will the discharge take place on more than six days in any year?

Yes

No

3 Discharge options

3a How far away is the nearest sewer (in metres)?

You will need to check this with your sewerage undertaker (usually your local water company) and you may also need to check if it is possible to connect to a private sewer.

3b You must explain why you cannot discharge your effluent into a sewer. You must show the extra cost of connecting to a sewer compared to the treatment you propose, and provide details of any physical obstacles; for example, roads, railways, rivers or canals. Where you are proposing a discharge from a private sewage treatment system in an area where it appears reasonable to discharge your effluent into a sewer, you must, as a minimum, send us evidence that you have approached the sewerage undertaker, and send us their formal response regarding connection.

The guidance notes on part B6 will help you understand what information you need to provide in answer to this question.

Document reference where you have given this justification

4 How much do you want to discharge?

4a What is the daily dry weather flow (in cubic metres)?

4b What is the maximum volume of effluent you will discharge in a day (in cubic metres)?

4c What is the maximum rate of discharge (in litres a second)?

4d What is the maximum volume of non-rainfall dependent effluent you will discharge in a day (in cubic metres)?

4 How much do you want to discharge?, continued

4e What is the maximum rate of rainfall dependent discharge (in litres per second)? _____

4f For each answer in question 4, show how you worked out the figure on a separate sheet

Document reference of the extra sheet _____

5 Intermittent sewage discharges

5a For each answer to b to j below, show how you worked out the figure on a separate sheet.

Document reference of the extra sheet _____

5b What is the total volume of the storm tank storage (in cubic metres)? _____

5c What is the pass forward flow at the settled storm overflow setting (in litres per second)? _____

5d What is the pass forward flow at the storm overflow setting (in litres per second)? _____

5e What is the total volume of storage (in cubic metres)? _____

5f Is the discharge screened?

Yes Answer the relevant questions from 5g to 5j

No Go to 5k

5g What is the mesh screen spacing (in millimetres)? _____

5h What is the maximum flow through the mesh screen (in litres per second)? _____

5i What is the bar screen spacing (in millimetres)? _____

5j What is the maximum flow through the bar screen (in litres per second)? _____

5k Is the overflow constructed to good engineering design?

Yes

No

5l What is the emergency storage capacity of the sewer and wet well (in cubic metres)? _____

5m What is the storage time within the sewer and the wet well above the top water level at dry weather flow (in hours and minutes)? _____

5n What is the pass forward flow at the pumping station (in litres per second)? _____

6 How will the effluent be treated?

6a Do you treat your effluent?

Yes Now go to question 6b

No You must explain why the effluent will not be treated

Document reference for where you have given this justification _____

6b Fill in Table 2 for each stage of the treatments carried out on your effluent in the order in which they are carried out

Table 2 – Treatments carried out on your effluent

Order of treatment	Code number	Description
First		
Second		
Third		
Fourth		

Continue on a separate sheet if you need more rows. If you prefer, you can also send us an overall design for the whole treatment process.

Document reference for the extra sheet _____

6 How will the effluent be treated?, continued

6c You must provide details on a separate sheet of the final effluent discharge quality that the overall treatment system is designed to achieve.

Document reference for the extra sheet _____

7 What will be in the effluent?

Note: You **do not** need to fill in this section if you are applying for a discharge of treated domestic sewage effluent of up to fifteen cubic metres (15m³) a day to ground, or up to twenty cubic metres (20m³) a day to surface water.

For all applications, whether to surface water, or onto or into ground you should still check to see if your discharge is likely to contain any of the substances listed in Horizontal Guidance H1 Environmental Risk Assessment Annex D, Appendix A and answer the relevant questions for your discharge below.

7a Are any of the substances listed in Horizontal Guidance H1 Environmental Risk Assessment Annex D, Appendix A likely to enter the sewerage system upstream of the discharge through any authorised or known inputs?

Yes

No

7b Are any of the substances listed in Horizontal Guidance H1 Environmental Risk Assessment Annex D, Appendix A added to or present in the effluent as a result of the activities on the site?

Yes

No

7c Have any of the substances listed in Horizontal Guidance H1 Environmental Risk Assessment Annex D, Appendix A been detected in samples of the effluent or in the sewerage catchment upstream of the discharge?

Yes

No

7d Are there any other harmful or hazardous substances in your effluent not mentioned in Horizontal Guidance H1 Environmental Risk Assessment Annex D, Appendix A?

Yes

No

7e **If you have answered yes to any of the above, give details, using the headings below, on a separate sheet**

You must also send us any information on samples that you may have.

Document reference of this sheet _____

Substance	Unit	Maximum concentration	Minimum concentration	Average concentration	Number of samples	Total or dissolved

7f Give the maximum temperature of your discharge in degrees Celsius _____

7g The maximum expected temperature change compared to the incoming water supply

Increase in degrees Celsius _____

Decrease in degrees Celsius _____

8 Monitoring arrangements

Note: If your effluent has a maximum volume of no more than 50 cubic metres a day you do not need to complete question d or e.

8a What is the national grid reference of the inlet sampling point? _____

8b What is the national grid reference of the effluent sample point? _____

8c Do you have an Urban Waste Water Treatment Directive final effluent sampling point?

Yes Please provide the national grid reference (for example, SJ 12345 67890) _____

No

8d What is the national grid reference of the flow monitoring point? _____

8e Does the flow monitor have an MCERTS certificate?

Yes Please give the certificate number _____

No

8 Monitoring arrangements, continued

8f Do you have a UV disinfection efficacy monitoring point?

Yes Please provide the national grid reference

No

8g You should clearly mark on the plan the locations of any of the above that apply to this effluent

Document reference for the plan

9 Emissions of substances not controlled by emission limits management plan

Note: You **do not** need to fill in this section if you are applying for a discharge of treated domestic sewage effluent of up to fifteen cubic metres (15m³) a day to ground, or up to twenty cubic metres (20m³) a day to surface water.

9a Does your H1 – Environmental Risk Assessment show that emissions of substances not likely to be controlled by emission limits in your permit are an important issue?

Yes

No

9b If yes, have you got an emissions management plan which meets the requirements set out in our guidance document 'How to comply'?

Yes Please send us your emissions management plan

Document reference for the plan

No

10 Design criteria

Note: You **do not** need to fill in this section if you are applying for a discharge of treated domestic sewage effluent of up to fifteen cubic metres (15m³) a day to ground, or up to twenty cubic metres (20m³) a day to surface water.

10a Sewer modelling report (for discharges of final effluent from a water company WwTW or intermittent sewage discharges)

You must carry out sewer modelling following the guidance in 'Horizontal Guidance Note H1 Annex E – Surface Water Discharges (complex)'. Send us details of how the modelling was carried out and the outcome.

Document reference for the report

10b Discharges to lakes, estuaries, coastal waters or bathing waters

You must carry out modelling following the guidance in 'H1 Risk Assessment Horizontal Guidance Note H1 Annex E – Surface Water Discharges (complex)'. Send us details of how the modelling was carried out and the outcome.

Document reference for the report

10c Discharges to non-tidal rivers

You may need to carry out modelling following the guidance in 'H1 Risk Assessment Horizontal Guidance Note H1 Annex E – Surface Water Discharges (complex)'. Have you carried out any river quality modelling?

Yes Send us details of how the modelling was carried out and the outcome.

Document reference for the report

No

10d Discharges to groundwater

You must carry out a groundwater quantitative risk assessment following the guidance in 'H1 Risk Assessment Horizontal Guidance Note H1 Annex J – Groundwater'. Send us details of how the modelling was carried out and the outcome.

For groundwater remediation schemes you must send us a site-specific remediation strategy which has been agreed with the local Environment Agency Groundwater and Contaminated Land Team.

Document reference for the report

10e Environmental impact assessment

Have you carried out an environmental impact assessment?

Yes

Send us details of how the assessment was carried out and the outcome.

Document reference for the report

No

11 Where will the effluent discharge to?

11a Mark in Table 3 where this effluent discharges to and fill in the relevant questions and appendix or appendices. You must use the name you gave to this effluent in answer to question 1b of this form when filling in your relevant appendix or appendices.

Table 3 – Where the effluent discharges to

Receiving environment	X	Relevant questions below	Relevant appendix
Borehole or well		b, c	1
Into land (for example, through a drainage system)		b, c, d	2
Onto land		b, c, d	3
Tidal river, tidal stream, estuary or coastal waters		b, c, d	4
Non-tidal river, stream or canal		b, c, d	5
Lake or pond		b, c, d	6

11b Is this effluent discharged through more than one outlet?

Yes

No

11c If yes, on a separate sheet, give details of the circumstances under which each outlet would be used by this effluent

Document reference for this extra sheet

11d If you answered yes to question b above make sure you show clearly on your discharge point appendix or appendices and site plan that this one effluent can discharge to more than one discharge point

You must give us all the details we need for each of the discharge points used by this effluent.

12 More information from you

Are there any other factors we need to take into account as part of your application?

Yes Please provide details

Document reference for these details

No

13 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 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.environment-agency.gov.uk

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, please tell us how we can improve it.

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.

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 borehole or well (or other deep structure such as a mineshaft)

Answer all the questions below. Use a separate line for each effluent if more than one effluent discharges using this discharge point. Remember, when linking your effluent to a discharge point you must use the name you gave to your effluent in answer to question 1b in the effluent form.

1 Give the discharge point a unique name
For example, ‘Outlet 1’ (you must use this name to identify the discharge point on the plan)

2 Give the national grid reference of the discharge point

3 Is the discharge to ground via a

Well

Borehole

Other deep structure Please give details

4 What is/or will be the total depth of the borehole or well (in metres) below ground or other reference level (please specify the reference level you are using)?

5 Is the borehole or well or structure already constructed?

Yes

No

6 To what depth is the borehole or well or structure sealed with unperforated linings or casing (in metres) below your reference level?

7 Is any part of your discharge within 50 metres of another well, spring or borehole?

No Go to question 9

Yes Identify the location of the well, spring or borehole on the plan you have provided and answer question 8.

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

No

Yes You must describe what the water supplied is used for.

9 Does the borehole or well or structure into which you are intending to make your discharge intermittently or permanently contain standing water?

Yes Now answer question 10 and 11

No Only answer question 10

10 What is the highest level the standing water reaches in the borehole or well or structure (in metres) below your reference level?

11 If you answered yes to question 9 and your discharge falls into any of the following groups of activities please tick the appropriate box. If not just leave blank.

Injection of water containing substances resulting from the operations for exploration and extraction of hydrocarbons or mining activities

Reinjection of pumped groundwater from mines and quarries or associated with the construction or maintenance of civil engineering works (includes the treatment and reinjection of contaminated groundwater for the purposes of remediation)

Injection of natural gas or liquefied petroleum gas for storage purposes

Construction, civil engineering and building works and similar activities on or in the ground (for example discharge arising from the grouting of old mineshafts)

Appendix 1 – Discharges to a borehole or well (or other deep structure such as a mineshaft), continued

- Discharges of small quantities of substances for scientific purposes for characterisation, protection (including use of substances as tracers) or remediation of groundwater, where such activities are not eligible for a registered exemption
- The artificial recharge or augmentation of a body of groundwater for the purposes of groundwater management
- Reinjection of pumped groundwater used for geothermal purposes (including ground source heat systems)

Appendix 2 – Discharges into land

Answer the questions below and enter the answers to questions 1 and 2 in the table provided. Use a separate line for each effluent if more than one effluent discharges using this discharge point. Remember, when linking your effluent to a discharge point you must use the name you gave to your effluent in answer to question 1b in the effluent form.

1 Give the discharge point a unique name

For example, 'Outlet 1' (you must use this name to identify the discharge point on the plan)

2 Give the national grid reference of the discharge point

3 Is your infiltration system new or existing?

New

Now go to question 5

Existing

Now go to question 4

4a When was it built?

4b Now answer questions 5–8 if you are able to, if not leave them blank and go to question 9.

5 Is your infiltration system designed and built to British Standard 6297:2007 + A1:2008?

Yes

No Please provide details, on a separate sheet, of the design criteria used for your infiltration system

Document reference

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

Date (DD/MM/YYYY)

7 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.

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

8 What is the surface area of your infiltration system (in square metres)?

9 If known, mark on the plan you have provided the extent of the infiltration system

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

No

Yes Identify the location of the well spring or borehole on the plan you have provided and answer question 11.

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

No

Yes You must describe what the water supplied is used for.

12 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 part B6.

Appendix 2 – Discharges into land, continued

Answers table

Discharge point name (question 1)	National grid reference (question 2)	Name of effluent discharged through this discharge point (question 1b effluent form)

Appendix 3 – Discharges onto land

Answer all the questions below and enter the answers to questions 1 and 2 in the table provided. Use a separate line for each effluent if more than one effluent discharges using this discharge point. Remember, when linking your effluent to a discharge point you must use the name you gave to your effluent in answer to question 1b in the effluent form.

1 Give the discharge point a unique name

For example, 'Outlet 1' (you must use this name to identify the discharge point on the plan)

2 Give the national grid reference of the discharge point

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

Area Type	
Unlined reed bed	<input type="checkbox"/>
Unlined grass plot	<input type="checkbox"/>
Unlined wetland	<input type="checkbox"/>
Other	<input type="checkbox"/> Please specify below

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

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

No

Yes Identify the location of the well spring or borehole on the plan you have provided and answer question 6.

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

No

Yes You must describe what the water supplied is used for.

7 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 part B6.

Appendix 3 – Discharges onto land, continued

Answers table

Discharge point name (question 1)	National grid reference (question 2)	Name of effluent discharged through this discharge point (question 1b effluent form)

Appendix 4 – Discharges to tidal river, tidal stream, estuary or coastal waters

Answer all the questions below and enter the answers to questions 1, 2 and 3 in the table provided. Use a separate line for each effluent if more than one effluent discharges using this discharge point. Remember, when linking your effluent to a discharge point you must use the name you gave to your effluent in answer to question 1b in the effluent form.

1 Give the discharge point a unique name
For example, 'Outlet 1' (you must use this name to identify the discharge point on the plan) _____

2 Give the national grid reference of the discharge point _____

3 Give the name of the tidal river, tidal stream, estuary or area of coastal water if you know it _____

- 4 Is the discharge into a
- Tidal river
 - Tidal stream
 - An estuary
 - Coastal water

5 Does the discharge reach the watercourse by flowing through a surface water sewer?
Yes Give the national grid reference where the discharge enters the surface water sewer _____
No

6 Is the discharge point above the mean low water spring tide mark?
Yes Please explain, on a separate sheet, why the discharge cannot be made below this point
Document reference _____
No

7 How is the effluent dispersed? For example, open pipe or diffuser system _____
If diffuser system go to question 8

8 Give details, on a separate sheet, of the design of the diffuser system
Document reference _____

Appendix 4 – Discharges to tidal river, tidal stream, estuary or coastal waters, continued

Answers table

Discharge point name (question 1)	National grid reference (question 2)	Name (question 3)	Name of effluent discharged through this discharge point (question 1b effluent form)

Appendix 5 – Discharges to non-tidal river, stream or canal

Answer all the questions below and enter the answers to questions 1, 2 and 3 in the table provided. Use a separate line for each effluent if more than one effluent discharges using this discharge point. Remember, when linking your effluent to a discharge point you must use the name you gave to your effluent in answer to question 1b in the effluent form.

1 Give the discharge point a unique name
For example, 'Outlet 1' (you must use this name to identify the discharge point on the plan) _____

2 Give the national grid reference of the discharge point _____

3 Give the name of the watercourse, canal or the main watercourse it is a tributary of if you know it _____

4 Is the discharge into a
 Non-tidal river
 Stream
 Canal

5 Does the discharge reach the watercourse or canal by flowing through a surface water sewer?
 Yes Give the national grid reference where the discharge enters the surface water sewer _____
 No

6 Does the watercourse dry up for part of the year?
 Yes
 No

Answers table

Discharge point name (question 1)	National grid reference (question 2)	Name (question 3)	Name of effluent discharged through this discharge point (question 1b effluent form)

Appendix 6 – Discharges to a lake or pond

Answer the questions below and enter the answers to questions 1, 2 and 3 in the table provided. Use a separate line for each effluent if more than one effluent discharges using this discharge point. Remember, when linking your effluent to a discharge point you must use the name you gave to your effluent in answer to question 1b in the effluent form.

1 Give the discharge point a unique name

For example 'Outlet 1' (you must use this name to identify the discharge point on the plan)

2 Give the national grid reference of the discharge point

3 Give the name of the lake or pond if you know it

4 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		Relevant questions
Lake or pond which does not discharge into a river or watercourse or another pond which discharges into a river or watercourse	<input type="checkbox"/>	Permit not required*
Lake or pond which does not discharge into a river or watercourse or another pond which discharges into a river or watercourse where you have had a notice served under paragraph 5 of Schedule 21 of the Environmental Permitting (England and Wales) Regulations 2010	<input type="checkbox"/>	5, 6, 7
Lake or pond which discharges into a river or watercourse	<input type="checkbox"/>	5, 6, 7

*Unless a Notice has been served under paragraph 5 of Schedule 21 of the Environmental Permitting (England and Wales) Regulations 2010

5 What is the surface area of the lake or pond (in square metres)?

6 What is the maximum depth of the lake or pond (in metres)?

7 What is the average depth of the lake or pond (in metres)?

Answers table

Discharge point name (question 1)	National grid reference (question 2)	Name of lake or pond (question 3)	Name of effluent discharged through this discharge point (question 1b effluent form)