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

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

Contents

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
Trade – known volume	☐	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	☐	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)	☐	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
Intermittent settled storm sewage	☐	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	☑	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	☐	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	☐	All	a, b	–	a, f, b (optional)	–	All	a, b, c, d, e	a, b, c, d*, e*, f*, g (See note below)	All	a, b, c, d, e	All
Domestic sewage	☐	All	a, b, c, d	a, b	b, f	–	All	b*, d*, e* (See note below)	b, d*, e*, f*, g (See note below)	All* (see note below)	b*, c*, d*, e*	All
Mixed effluent – all effluent volumes	☐	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	☐	All	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

Storm/emergency discharges from Bishop Sutton sewage pumping station. Wessex Water mistakenly requested that the previous permit, number 011482, be revoked in 2008, as we believed there was no storm overflow at the site. We have since discovered that there is a storm overflow however, and can confirm that it has been in place, unchanged, for many years. We now wish to regularise the overflow with a new permit. We are also taking this opportunity to incorporate several planned improvements into the proposed new permit including:
1. New fine screening (6mm mesh)
2. Additional storm storage (56m3, 5.6hrs at DWF)

1b Give this effluent a unique name
You must use this name to identify this effluent throughout this application and all associated documents.

Name: Bishop Sutton SPS

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. ☐

1d Give the UK Standard Industrial Classification of Economic Activities 2007 (SIC 2007) code which best describes the main activity leading to this discharge

For private domestic dwellings use Z for section and A for class.

Section: E

Class or sub class: 90.00/1

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): 01/03/2013

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 but intermittently. 3 spills are forecast in a typical year.

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

Possibly

3 Discharge options

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

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, for example, the extra cost of connecting to a sewer compared to the treatment you propose and details of any physical obstacles such as roads, railways, rivers or canals

Document reference where you have given this justification: N/A

4 How much do you want to discharge?

4a What is the daily dry weather flow (in cubic metres)? 246

4b What is the maximum volume of effluent you will discharge in a day (in cubic metres)? Pumped overflow, 10368

4c What is the maximum rate of discharge (in litres a second)? Pumped overflow, 120 (2No pumps rated as 60 l/s each)

4d What is the maximum volume of non rainfall dependent effluent you will discharge in a day (in cubic metres)? 0

4 How much do you want to discharge?, continued

4e What is the maximum rate of rainfall dependent discharge (in litres per second)? Pumped overflow, 120

4f For each answer in question 4, show how you worked out the figure on a separate sheet. See Flow Data Sheet

Document reference of the extra sheet

5 Intermittent sewage discharges

5a What is the total volume of the storm tank storage (in cubic metres)? N/A

5b What is the pass forward flow at the settled storm overflow setting (in litres per second)? N/A

5c What is the pass forward flow at the storm overflow setting (in litres per second)? 19.6

5d What is the total volume of storage (in cubic metres)? 57

If the effluent is screened answer the relevant questions from e to h below, if it is not screened go to question i.

5e What is the mesh screen spacing (in millimetres)? 6

5f What is the maximum flow through the mesh screen (in litres per second)? 120

5g What is the bar screen spacing (in millimetres)? N/A

5h What is the maximum flow through the bar screen (in litres per second)? N/A

5i If the discharge is not screened, is the overflow constructed to good engineering design?

N/A ☐

☐

5j What is the emergency storage capacity of the sewer and wet well (in cubic metres)? N/A

5k 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)? 5hrs 36 mins

5l What is the pass forward flow at the pumping station (in litres per second)? As above, 19.6

5m For each answer to a–h above, show how you worked out the figure on a separate sheet

Document reference of the extra sheet See Flow Data Sheet

6 How will the effluent be treated?

6a Do you treat your effluent?

Yes ☐ Now go to question 6b

No ☑

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

7 What will be in the effluent?

Note: If you operate a sewage treatment facility that only receives domestic sewage and discharges no more than 20 cubic metres a day or less to a watercourse or to ground, you do not need to fill in this section.

If your application is for a discharge greater than 20 cubic metres a day 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?

N/A, existing discharge

☐

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?

N/A, existing discharge

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?

N/A, existing discharge

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?

N/A, existing discharge

☐

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

N/A, existing discharge

7f Give the maximum temperature of your discharge in degrees Celsius N/A, normal storm sewage effluent

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

Increase in degrees Celsius N/A, normal storm sewage effluent

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? N/A

8b What is the national grid reference of the effluent sample point? ST 58284 60143

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

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 ☐ N/A

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 Site Plan

9 Emissions of substances not controlled by emission limits management plan

Note: If you operate a sewage treatment facility that only receives domestic sewage and discharges no more than 20 cubic metres a day, you do not need to fill in this section.

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?

N/A, existing discharge

☐

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

N/A, existing discharge

☐

10 Design criteria

Note: If you operate a sewage treatment facility that only receives domestic sewage and discharges no more than 20 cubic metres a day you do not need to fill in this section.

10a Have you carried out any sewer modelling?

Yes ☐

No ☑

10b Have you carried out any bathing water, estuarial or coastal modelling?

Yes ☐

No ☑

10c Have you carried out any river quality modelling?

Yes ☐

No ☑

10d Have you carried out an environmental impact assessment?

Yes ☐

No ☑

10e If you have answered yes to any of the questions in this section, send us details of how the modelling or assessment was carried out and the outcome

Document reference for details

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	X	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: See covering letter

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: 08708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 08702 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 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 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)?

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.

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	☐
Unlined grass plot	☐
Unlined wetland	☐
Other	☐ 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.

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

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) — Bishop Sutton SPS CSO/EO

2 Give the national grid reference of the discharge point — ST 58142 60252

3 Give the name of the watercourse, canal or the main watercourse it is a tributary of if you know it — Tributary of Chew Valley Lake

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	☐	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	☐	5, 6, 7
Lake or pond which discharges into a river or watercourse	☐	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)