

Application for an environmental permit and full abstraction licence

Part B8 – New ground source or surface water source heating and cooling scheme



Fill in this part of the form, together with Parts A and F1, if you are applying for a new abstraction licence and a discharge permit for a ground source or surface water source heating and/or cooling scheme.

If you are registering a ground source scheme as exempt from the need for a discharge permit, you must also fill in a Registration Form.

Note: a heating or cooling discharge from an open loop system serving a single domestic property does not require a discharge permit if it meets the criteria in our 'Regulatory Position Statement'. You will still require an abstraction licence for volumes greater than 20 cubic metres' each day.

If your scheme meets the criteria for Standard Rule SR 2010 No 2 Discharge to surface water: cooling water and heat exchangers (max volume 1,000 cubic metres per day) you will also need to fill in Part B1.

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.

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1 Discussions before your application

If you have had discussions with us before your application, give us the permit reference or details on a separate sheet. Tell us below the reference you have given this extra sheet.

Permit or document reference

2 Scheme details

2a Type of scheme

Please specify whether your scheme is:

Heating and cooling

Heating only

Cooling only

Do you intend to use the abstracted water for any other purposes?

Yes Please give details below, including annual quantity

No

2 Scheme details, continued

2b Will the abstraction and discharge take place all year?

Yes

No Please give details of the months when you will be abstracting and discharging.

3 About the site location

3a What is the site name, address, postcode and national grid reference for the abstraction?

Unique name of abstraction point 1

Strata type/surface water name

Address

Postcode

National grid reference for the abstraction
(for example, ST 12345 67890)

Map label

Unique name of abstraction point 2 (if applicable)

Strata type/surface water name

Address

Postcode

National grid reference for the abstraction
(for example, ST 12345 67890)

Map label

Continue on a separate sheet if you have more abstraction points.
Document reference of the extra sheet

3b What is the site name, address, postcode and national grid reference for the discharge?

Unique name of discharge point 1

Strata type/surface water name

Address

Postcode

National grid reference for the discharge
(for example, ST 12345 67890)

Map label

3 About the site location, continued

Unique name of discharge point 2 (if applicable) _____

Strata type/surface water name _____

Address _____

Postcode _____

National grid reference for the discharge
(for example, ST 12345 67890) _____

Map label _____

If the effluent to be discharged is to more than one point (borehole or surface water outlet), give details on a separate sheet of the circumstances under which each discharge point will be used.

Document reference of the extra sheet _____

3c Provide a plan or plans for the site showing (see the guidance notes):

- the outline of the site
- label each abstraction point you intend to abstract water from
- label each discharge point
- label each monitoring point

Label each point on the plan to match the grid references and map labels in questions 3a and 3b.

Document reference or references of the plans _____

3d Do you intend to discharge all or part of the effluent to a foul sewer?

Yes Now go to question 3e

No Now go to question 3f

3e Do you have permission from the water company to discharge effluent into the foul sewer?

Yes

No

3f Will the abstraction be from:

Groundwater (for example, boreholes) Complete questions 4, 5 and 6

Surface water (for example, river or lake) Go to question 6

4 Groundwater investigation consent

4a Have you undertaken a groundwater investigation on this site?

No Please contact us before proceeding further

Yes Please give the consent reference number below or details of your contact at the Environment Agency

Consent reference number or contact person _____

4b Are any details in this application different from those you provided for the Groundwater Investigation Consent?

No

Yes Please provide a brief description of the differences. Use a separate sheet if you need more space and reference any extra sheet. Please be aware that depending on the changes made, we may need to re-issue your Groundwater Investigation Consent.

6 Abstraction and discharge quantity details

6a Fill in table 2 below to tell us what you will be using the water for and how much you need.

Table 2

Purpose of abstraction	Maximum yearly (m ³)	Maximum daily (m ³)	Maximum hourly (m ³)	Hours per day	Maximum flow rate (litres per second)
Total					

6b Fill in table 3 with the maximum volume of effluent you will discharge. If you are discharging to more than one borehole or surface water, then complete a row for each borehole.

Table 3

Map label	Maximum daily (m ³)	Peak instantaneous (litres/second)

6c For each answer in question 6a and 6b, show how you worked out the quantity on a separate sheet.

Document reference of the extra sheet

7 Method and measurement of abstraction

7.1 Fill in the table below to tell us how you will abstract water and measure the amount abstracted.

Abstraction name (as you gave in 3a)	Structure and equipment	Measurement method	Flood defence consent number (if you need flood defence consent)

8 Abstraction intake screening details

8a Have you had discussions with us regarding screening?

No Contact us before you send in this application to find out who to speak to

Yes In the box below give details of the discussions you have had

8 Abstraction intake screening details, continued

8b For surface water abstractions please provide details, in the box below, of the screen(s) (mesh size or bar spacing and type) to be used to protect fish, eels and elvers.

Details of approach velocities and angle of screening should also be stated.

Continue on a separate sheet if you need more space.

Document reference of the extra sheet

9 Entitlement to apply for abstraction licence

Do you have, or expect to have, a right of access to the land which comprises the abstraction points?

Have right of access

or state 'occupier', if applicable

Expect to have right of access

from (give date DD/MM/YYYY)

How have you marked the map you have enclosed to show the land you have or will have right of access to?

Please note we can't grant a licence until we have been told the rights of access are in place.

10 Duration of abstraction licence

We normally issue abstraction licences for a fixed period set by us (between six and 18 years).

If you need to abstract water for a period of up to 24 years you will need to demonstrate that your scheme can meet the conditions set out in our 'Guidance on Long Duration Licences'. Set out your business case for a long duration licence in the box below or attach on a separate sheet.

Continue on a separate sheet if you need more space.

Document reference of the extra sheet

If you would like us to consider a set start date for your licence, give the start date below.

Date from (DD/MM/YYYY)

11 Other abstraction considerations

11a Are any of the abstraction points in this application already licensed or in another application?

No

Yes Please give details

Name of site

Address

Postcode

National grid reference (for example, ST 12345 67890)

Serial number of licence or date you applied for it

11b Are you required to enter into a management agreement with Natural England?

No

Yes

11c Does any part of the proposed project require planning permission?

No Now go to question 12

Yes Now go to question 11d

11d What is the current status of your planning application?

Approved

Planning application reference number

Pending decision

Planning application reference number

Not yet submitted

Refused

12 About the discharge

12.1 Is your application for a ground source heating and/or cooling system?

Yes Go to question 12.2

No Go to question 12.3

12.2 Do you intend to register your ground source heating and cooling scheme as exempt from the need for an environmental permit? (See guidance notes on www.gov.uk/government/organisations/environment-agency.)

Yes Complete 'Low Risk GSHC Registration Form' available on www.gov.uk/government/organisations/environment-agency. Then go to question 20 to complete this form and return both forms to us, together with Part A – About you.

No Go to question 12.3

12.3 Does your scheme meet the criteria for a Standard Facilities Permit? (See details of 'Standard Rules SR2010 No2' at www.gov.uk/government/organisations/environment-agency).

Yes Fill in 'Application for an Environmental Permit Part B1 – Standard facilities permit' on www.gov.uk/government/organisations/environment-agency

Then go to question 20 to complete this form and return both forms to us, together with 'Part A – About you'.

No Go to question 13

13 Surface water discharge information

13.1 Discharge point 1 - Map label

13.1a Does the discharge reach the watercourse by flowing through a surface water sewer?

No

Yes Give the national grid references where the discharge enters the surface water sewer and where subsequently discharged to receiving water

National grid reference for the discharge
(for example, ST 12345 67890)

13.1b Is the discharge into a (directly or via a surface water sewer)

Tidal river Go to 13.1c

Tidal stream Go to 13.1c

Estuary Go to 13.1c

Coastal water Go to 13.1c

Non-tidal river Go to 13.1d

Non-tidal stream Go to 13.1d

Canal Go to 13.1d

Lake or pond Go to 13.1e

13.1c Is the discharge point above the mean low water spring tide mark?

No

Yes Please explain, on a separate sheet, why the discharge cannot be made below this point

Document reference of the extra sheet

Now go to Question 14 if there is a single discharge point or Question 13.2 if there is a second discharge point.

13.1d Is the effluent dispersed (for example, open pipe or diffuser system)?

No

Yes If diffuser system please explain, on a separate sheet, the design of the diffuser system

Document reference of the extra sheet

Now go to Question 14 if there is a single discharge point or Question 13.2 if there is a second discharge point.

13.1e 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"/>	13.1f, 13.1g, 13.1h
Lake or pond which discharges into a river or watercourse <input type="checkbox"/>	13.1f, 13.1g, 13.1h

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

13.1f What is the surface area of the lake or pond? _____ m²

13.1g What is the maximum depth of the lake or pond? _____ m

13.1h What is the average depth of the lake or pond? _____ m

Now go to Question 14 if there is a single discharge point or Question 13.2 if there is a second discharge point.

13 Surface water discharge information, continued

13.2 Discharge point 2 - Map label

13.2a Does the discharge reach the watercourse by flowing through a surface water sewer?

No

Yes Give the national grid references where the discharge enters the surface water sewer and where subsequently discharged to receiving water

National grid reference for the discharge
(for example, ST 12345 67890)

13.2b Is the discharge into a (directly or via a surface water sewer)

Tidal river Go to 13.2c

Tidal stream Go to 13.2c

Estuary Go to 13.2c

Coastal water Go to 13.2c

Non-tidal river Go to 13.2d

Non-tidal stream Go to 13.2d

Canal Go to 13.2d

Lake or pond Go to 13.2e

13.2c Is the discharge point above the mean low water spring tide mark?

No

Yes Please explain, on a separate sheet, why the discharge cannot be made below this point

Document reference of the extra sheet

Now go to Question 14.

13.2d Is the effluent dispersed (for example, open pipe or diffuser system)?

No

Yes If diffuser system please explain, on a separate sheet, the design of the diffuser system

Document reference of the extra sheet

Now go to Question 14.

13.2e 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"/>	13.2f, 13.2g, 13.2h
Lake or pond which discharges into a river or watercourse <input type="checkbox"/>	13.2f, 13.2g, 13.2h

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

13.2f What is the surface area of the lake or pond? _____ m²

13.2g What is the maximum depth of the lake or pond? _____ m

13.2h What is the average depth of the lake or pond? _____ m

Now go to Question 14.

14 Period of operation

14a What date do you want the permit for this discharge to start?

Date (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. The start date cannot be before the permit is issued.

15 How will the discharged effluent be treated?

15a Do you treat your effluent?

No Now go to question 16

Yes Now go to question 15b

15b Fill in the box below with details for each stage of the treatments carried out on your effluent in the order in which they are carried out, including each stage of periodic cleaning of heat exchangers and screening.

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

Document reference of the extra sheet _____

16 What will be in the effluent?

Check to see if your discharge is likely to contain any of the specific substances listed in the guidance documents on Risk assessment for treated sewage or trade effluent discharges to surface water or groundwater – search for this term on www.gov.uk/government/organisations/environment-agency and answer the relevant questions for your discharge below.

16a Are any of the specific substances listed in ‘Risk assessment for treated sewage or trade effluent discharges to surface water or groundwater’ added to or present in the effluent as a result of the activities on the site?

No

Yes

16b Have any of the specific substances listed in ‘Risk assessment for treated sewage or trade effluent discharges to surface water or groundwater’ been detected in samples of the effluent?

No

Yes

16c Are there any other harmful or specific substances in your effluent not mentioned in ‘Risk assessment for treated sewage or trade effluent discharges to surface water or groundwater’?

No

Yes

16d If the discharge contains, or potentially contains, any specific substances, you must carry out screening following the guidance in ‘Risk assessment for treated sewage or trade effluent discharges to surface water or groundwater’. The guidance to this form outlines the information you must provide.

Have you answered yes to any of 16a–16c?

Yes Send us the completed H1 screening tool, along with the raw data used to create the summary statistics

Document reference for the screening tool and raw data _____

No

16e Thermal assessment and report

Provide a thermal assessment and report (see guidance notes).

Document reference for the assessment _____

16f Give the maximum temperature of your discharge _____

Degrees Celsius

16 What will be in the effluent, continued

- 16g Give the maximum expected temperature change compared with the abstracted water supply
- | | |
|-------|-----------------------------|
| _____ | Increase in degrees Celsius |
| _____ | Decrease in degrees Celsius |

17 Abstraction and discharge monitoring arrangements

17a What is the national grid reference of the inlet sampling point where the temperature of the abstraction can be monitored? (for example, ST 12345 67890)

17b What is the national grid reference of the inlet sampling point where the temperature of the discharge can be monitored? (for example, ST 12345 67890)

17c What is the national grid reference of the flow monitoring point? (for example, ST 12345 67890)

17d Does the flow monitor have an MCERTS certificate?

No

Yes Please give the certificate number _____

17e You should clearly label on the plan the locations of any of the above that apply to this effluent. On the map you send us (see section 3) label the above locations.

17f Do you intend to do your own effluent monitoring?

No

Yes

18 Your ability as an operator

Management systems for discharge

18a Does your management system meet the conditions set out in our guidance?

- No
- Yes

18b What management system will you provide for your regulated facility?

- EC Eco-Management and Audit Scheme (EMAS)
- ISO 14001
- BS 8555 (Phases 1–5)
- Green Dragon
- Own management system

Please make sure you send us a summary of your management system with your application.

Document reference (or references) _____

19 Supporting information

19a Provide a non-technical summary of your application.

Document reference of the summary _____

19b Environmental risk assessment

Provide an assessment of the risks each of your proposed regulated facilities poses to the environment. If you have prepared an Environmental Impact Assessment please provide a copy of the Environmental Statement with this application.

We will also require a risk assessment using the process set out in 'Risk assessment for treated sewage or trade effluent discharges to surface water or groundwater' at www.gov.uk/government/organisations/environment-agency or an equivalent method.

Document reference of the assessment _____

20 Fees and charges

Please refer to our 'Abstraction Charges Scheme' and to our 'Environmental Permitting: Charging scheme and guidance', both of which can be found on www.gov.uk/government/organisations/environment-agency.

Please confirm you have enclosed the correct fees required to process your application by ticking this box

21 Commercial confidentiality and national security for the abstraction (Note: Part F2 also has this section for the discharges)

You may be able to claim commercial confidentiality for information contained in your application. Please read the guidance note for this question, along with 'WR25 – Public register and advertising applications' before responding below.

Tick the box if you want to claim commercial confidentiality for some information in your application

Please treat the information listed and justified in the attached letter as commercially confidential.

Note: You should make sure that we can easily identify the information which you consider to be confidential. It will help us if the information you want us to treat as commercially confidential is provided in a way which will allow it to be easily removed (for example, on separate pages marked 'claimed confidential').

You can ask the Secretary of State for information in your form not to be included in any public notice or the public register because including it would be a risk to national security. With your application you must enclose a letter telling us that you have asked the Secretary of State for this, and you must still include the information in your application. We will not include the information in any public notice or public register unless the Secretary of State decides that it should be included.

You cannot apply for national security through this application.

22 Abstraction declaration (declaration for discharge is in Part F2)

Information on who has authority to sign the form is given below and in the guidance notes. It is an offence to make a false statement when applying for a licence.

Type of licence holder	Signature needed
Registered company	Company director or company secretary
Limited liability partnership	A partner, company director or company secretary
Individual	The individual
Public body (for example, a local authority or NHS trust)	A person authorised to sign documents on behalf of the organisation
Group of individuals	All individuals' signatures
Partnerships	One or more of the partners
Trust	All trustees or the chairman, treasurer or secretary

I declare that to the best of my knowledge the statements made in the application forms for abstraction, including the map and any accompanying sheets, are true

Signature

Name

Position

Date (DD/MM/YYYY)

23 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.

23 The Data Protection Act 1998, continued

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.

24 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.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, 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 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 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

£ _____