

# Apply for a bespoke water discharge or groundwater activity permit

## About you

Who will be the permit holder?

A registered company (including limited liability partnerships) or other corporate body

## Registered company or other corporate body

Please provide details below

**Company name:** Ford Motor Company Limited  
**Company address:** Arterial Road, Laindon  
Essex, England  
**Company postcode:** SS15 6EE  
**Company registration number:** 00235446  
**Date of registration (DD/MM/YYYY):** 07/12/1928

Contact name for the company

**Title:** -  
**First name:** Simon  
**Last name:** Plant  
**Email:** splant2@ford.com  
**Telephone:** 07971 492982

## Is somebody completing this application on your behalf?

Tell us if you're using an agent or somebody else to complete this application on your behalf

No – I'm completing this application for myself

## Pre-application discussions

Did you have pre-applications discussions with Natural Resources Wales about this activity?

Yes

## Pre-application discussions

Give us the case reference or details of the pre-application advice you received. We will then be able to refer back to the information you've already given us, which will help us to determine your application.

PLEASE NOTE - Formal Pre-Application Advice has not been provided.

Extensive site investigation and risk assessment work has been completed across the site. Detailed discussions regarding remediation techniques and remediation criteria have been held with the Geoscience team at NRW. During our discussions with them, they provided advice regarding the nature of permits that may be required to consider the reintroduction of abstracted groundwater in to the aquifer and put us in contact with the local NRW Water Quality Team for the Bridgend area.

We completed the pre-application advice form for the local NRW Water Quality Team and they provided feedback confirming that, based on the information we provided to them in the pre-application advice form, they feel we are in a position to submit an permit application without the need for formal pre-application advice.

On this basis, we are submitting this permit application form.

Have you changed your proposal since you had pre-application discussions with us?

No

If yes please tell us what has changed

No changes

## Where will you be discharging?

Please complete

**Site name** Former Ford Engine Plant  
**Address** Waterton Industrial Estate, Cowbridge Road  
Bridgend  
**Postcode** CF31 3PJ

Please provide the 12 character national grid reference of the location of your septic tank / sewage treatment plant. This consists of two letters followed by 10 numbers (for example AB 12345 67890)

To find out the 12 character grid reference, you can search on the UK grid reference finder website: <http://www.gridreferencefinder.com/> (opens in new tab)

SS 93254 78123

Please note that this is the national grid reference for the area of the site we are proposing to use to discharge the groundwater as we do not have, and will not have, a discrete septic tank or sewage treatment plant as the permit does not relate to foul waste.

## About the effluent

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

The effluent to be discharged from the site will comprise groundwater seepage associated with a significant, but short term engineering project. The project involves the removal of a steel and concrete constructed basement at the site with dimensions of approximately 180m (length) x 15m (width) x 10m (depth). The basement was constructed in bed rock approximately 35 years ago. To ensure the safety of the engineering project (1, operatives need to be able to see what they are excavating; and 2, we do not want risks associated with deep water ponding at the site), any seepage will be removed from the void space created by the removal of the basement structure until the void is backfilled with clean, freshly quarried, local imported stone.

Based on the findings of the significant investigation work completed at the site, and recent trial pitting tests, we do not anticipate the groundwater seepage will contain measurable concentrations of contaminants used during the operation of the site. However, given some low level concentrations of contaminants have been recorded in boreholes in the vicinity of the basement over the past 5 years, we are applying for this permit to ensure we are managing any impacted groundwater in line with NRW's requirements.

Give this effluent a unique name

This name will be used throughout the application and may be used in the permit to identify this effluent. If you have more than one effluent you must ensure that each name you use is distinct. For example, package sewage treatment plant effluent, septic tank effluent, cooling water, site drainage and so on.

SIGMA Basement Seepage

Is this a release from a dam, weir or sluice ('reservoir release') under Schedule 21 of the EPR meaning of water discharge activity?

No

Tell us the effluent type:

You must fill in a separate copy of this form for each type of effluent you plan to discharge.

Trade – returned abstracted water (including ground source heating and cooling schemes)

## Trade - returned abstracted water: How long will you need to discharge?

What date do you want the permit for this effluent to start?

You cannot discharge your effluent prior to this start date on your permit. This is the date that your annual subsistence charges will start, even if you have not started to discharge.

\* 10/11/2025

For seasonal discharges which only occur for part of the year, tells us when the discharge will take place. Where a discharge will continue at a significantly lower rate over a period you should complete this question and also send in details of the seasonal variation. For example, campsites which are closed in winter but have a residual throughput from residential properties on site all year.

Will the discharge take place all year?

No

**Please give details below, of the months when you will make the discharge**  
Maximum of 6 months from start date

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

If you answer 'no' you must be able to comply with the requirement to discharge on six days or fewer in any year as this will be a permit condition. It would apply only to batch processes such as the emptying of fish rearing ponds or planned shutdowns of plant or equipment.

Yes

## Could your discharge from other premises be made to the foul sewer?

How far away is the nearest foul sewer from the boundary of the properties (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 foul sewer. Measure the shortest distance between the boundary of premises served by the private sewage treatment system and the nearest foul sewer and/or private sewer.

NRW advice is that discharge to foul sewer would not be supported.

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 discharge (in cubic metres)	Divided by 0.75	Multiplied by 30 metres
Your premises	NA	NA	NA

Is this distance you've calculated greater than the distance to the nearest foul sewer you've provided above?

Yes

## Trade – returned abstracted water: How much do you want to discharge?

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

Estimated to be 1,200 cubic metres per day - please note that this may vary due to the engineering work being completed in fractured bedrock

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

Estimated at 14 l/s (13.89)

Tell us how you have calculate this figure in the box below, or upload a copy of your workings in the next question.

The engineering work that will take place is within fractured bedrock. It is not known whether the exposed faces of the bedrock will contain significant fissures or fractures which could result in significant flow in to the void created prior to backfilling. At the time of construction, anecdotal evidence suggests that this was the approximate daily volume removed at that time.

It is intended to have temporary holding/attenuation tanks on-site to manage the return flow of treated groundwater.

We have included a number of photos taken at the time of the basement construction so that you can see the size and complexity of the engineering project.

Tell us how you have calculated this figure by uploading a copy of your workings.

- File: 2025\_10\_08\_SIGMA Basement Construction Photos.pdf - [Download](#)

## Trade – returned abstracted water: How will the effluent be treated?

Do you treat your effluent?

Yes

**If no, please explain why the effluent will not be treated:**

Groundwater seepage that exhibits concentrations of petroleum and/or chlorinated hydrocarbons and/or PAHs that are above laboratory detection limits, but below existing background concentrations (i.e. below concentrations recorded in monitoring wells within the vicinity of the basement structure), will be discharged directly to the ground within the site boundary and as close to the SIGMA Basement as is reasonably practicable whilst maintaining the safety of the engineering project (see site plan showing proposed discharge locations). Should groundwater seepage be encountered with concentrations of petroleum and/or chlorinated hydrocarbons and/or PAHs that exceed the existing background levels, groundwater treatment will be applied to reduce concentrations of the respective contaminants to below the agreed discharge concentrations (i.e. below the existing background concentrations). The treated groundwater will subsequently be discharged at the same locations that non-treated water is discharged assuming it meets the agreed discharge criteria.

Regular monitoring will be undertaken to determine the nature of the treatment should it be required which will depend on the analytical data associated with the quality of the seepage removed.

A treatment plant including sand filtration and activated carbon treatment is present on site and would be available as part of a treatment train should it be required.

Please fill in the table below for each stage of the treatments carried out on your effluent in the order in which they are carried out. . If you prefer, you can upload an overall design for the whole treatment process below

	Code number
First treatment	32 No treatment required – good engineering
Second treatment	29 Settlement
Third treatment	02 Package treatment plant
Fourth treatment	-

#### Final effluent discharge quality

You must provide details of the final effluent discharge quality that the overall treatment system is designed to achieve. This should be after all the stages of treatment you have listed in the table above. For discharges of treated domestic sewage effluent this must include biochemical oxygen demand, suspended solids and ammonia. For trade effluent discharges, the substances should reflect the substances that are likely to be present in the final effluent discharge.

Please upload this and any supporting documents here.

- File: 2025\_10\_17\_Background Monitoring Data & Proposed Max Discharge Criteria - SIGMA Basement (version 1).xlsx - [Download](#)
- File: 2025\_10\_21\_Summary of Groundwater Data Provided.pdf - [Download](#)
- File: 2025\_09\_11\_SIGMA East\_Trial Pump Data (some sediment).pdf - [Download](#)
- File: 2025\_10\_08\_SIGMA North\_Trial Pump Data (some sediment).pdf - [Download](#)
- File: 2025\_10\_08\_SIGMA South E\_Trial Pump Data (some sediment).pdf - [Download](#)
- File: 2025\_10\_08\_SIGMA South W1\_Trial Pump Data.pdf - [Download](#)
- File: 2025\_10\_08\_SIGMA South W2\_Trial Pump Data.pdf - [Download](#)
- File: 2025\_10\_08\_SIGMA South W3\_Trial Pump Data.pdf - [Download](#)
- File: 2025\_10\_08\_SIGMA West\_Trial Pump Data.pdf - [Download](#)
- File: 2025\_10\_08\_Velocity Trench Seepage.pdf - [Download](#)

### Trade – returned abstracted water: What will be in the effluent?

Are any 'specific substances' added to or present in the effluent as a result of the activities on the site?

You may add chemicals to the effluent during the treatment process; for example, iron salts to remove phosphate. Or you may have substances present in your effluent as a result of activities on your site; for example, chromium can be present in effluents from concrete batching plants.

No

Have any 'specific substances' been detected in samples of the effluent or in the sewerage catchment upstream of the discharge?

Yes

Are there any other harmful or hazardous substances in your effluent not mentioned in the environmental risk assessment guidance ?

The list in the environmental risk assessment guidance is not exhaustive and if you accept, add or detect any other harmful substance (including hazardous substances or relevant non-hazardous pollutants as described above) you will need to tell us.

No

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

- File: 2025\_10\_17\_Background Monitoring Data & Proposed Max Discharge Criteria - SIGMA Basement (version 1).xlsx - [Download](#)
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- File: 2025\_10\_08\_SIGMA West\_Trial Pump Data.pdf - [Download](#)
- File: 2025\_10\_08\_Velocity Trench Seepage.pdf - [Download](#)

Give the maximum temperature of your discharge in degrees Celsius

Local groundwater temperature circa 10-15 degrees celcius

## Trade – returned abstracted water: Monitoring arrangements

Please provide the 12 character national grid reference of the final effluent sample point.

This is the sample point used to assess compliance with any water quality emission limits on your permit. You must ensure that it allows a representative sample of the discharge to be obtained. You must also ensure that all constituents of the discharge pass through the sampling point at all times. The sample point can be where the effluent meets the receiving environment only in cases where no other effluent is added before this point. You must provide a permanent means of access to monitoring points.

A 12 character national grid reference consists of two letters followed by 10 numbers (for example AB 12345 67890). To find out the 12 character grid reference, you can search on the UK grid reference finder website: [gridreferencefinder.com](http://gridreferencefinder.com) (opens in new tab)

SS 93254 78123

Do you have a UV disinfection efficacy monitoring point?

This type of monitoring point is only required for discharges that undergo some form of disinfection. For example, ozone or ultraviolet disinfection, membrane filtration etc.

No

What is the 12 character national grid reference of the flow monitoring point?

A 12 character national grid reference consists of two letters followed by 10 numbers (for example AB 12345 67890). To find out the 12 character grid reference, you can search on the UK grid reference finder website [gridreferencefinder.com](http://gridreferencefinder.com) (opens in new tab)

SS 93254 78123

Does the flow monitor have an MCERTS certificate?

No

## Your management systems

What management system will you provide for your regulated facility?

Own management system

I confirm that I have read the guidance and that my management system will meet NRW requirements.

Yes

You must send a suitable summary of your management system with your application – that includes enough information to allow us to assess whether your full system meets the standards set out in our guidance.

- File: 2025\_10\_21\_Summary of Proposed Management System.pdf - [Download](#)

## Where will the effluent discharge to?

Where will the effluent discharge to?

Onto land

Is this effluent discharged through more than one outlet?

Effluents are usually discharged to one location in one receiving environment. If your effluent will be discharged to more than one location within the same receiving environment, for example, two different discharge points on a non-tidal river, you can provide details of every discharge point on the next page.

If your effluent discharges to more than one location in a different receiving environment, for example, into land and to a non-tidal river you will need to select both receiving environments above and complete the relevant sections on the following pages.

No

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

Yes

**If yes, please give details:**

As agreed with NRW's Geoscience Team as part of the wider site remedial strategy (this permit application is not part of the remediation strategy), there is currently an injected permeable reactive barrier (PRB) at the north of the site which was installed by Arcadis (on behalf of Ford) in 2025. In addition, a second voluntary PRB utilising E-clay will be installed at the site in Q4 2025.

The locations of these PRBs are shown on the site location plan file uploaded earlier in the application.

The presence of these two PRBs will hopefully provide additional confidence to NRW that should any treated water be discharged to the ground, it will not only improve local water quality in the upgradient portion of the site, but will also undergo additional betterment as it passes through the down gradient barrier to the north.

## Discharges into land

Give the discharge point a unique name, for example, 'Outlet 1' (you must use this name to identify the discharge point on the plan) and the national grid reference

	Discharge point name	National grid reference	Name of effluent discharged through this discharge point
1	Disused Railway	-	SIGMA Basement Seepage
2	SIGMA Upgradient	-	SIGMA Basement Seepage
3	SIGMA Downgradient	-	SIGMA Basement Seepage
4	-	-	-
5	-	-	-

Is your infiltration system new or existing?

Before 1 April 2010 (existing)

When was it built?

30/06/1979

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

An infiltration system is a restricted and well-defined area of ground designed to allow liquid to drain into the surrounding soil. It typically includes a system of sub surface perforated pipe. New infiltration systems must be built to British Standard 6297:2007 + A1:2008. This ensures that the size of the drainage field is appropriate to the rate of discharge and the infiltration capacity of the ground, minimising the risk of pollution to groundwater.

No

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

No

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

No

#### Environmental risk assessment and modelling

You must carry out a groundwater quantitative risk assessment following the guidance in 'Groundwater risk assessment for your environmental permit' (opens in new tab). We cannot undertake assessments on your behalf, but we can offer advice as to what needs to be done through our pre-application advice service (opens in new tab). If you do not have the skills to do this yourself, then you will need to engage a consultant to advise you and to undertake the assessment. This risk assessment should be based on our guidance 'Groundwater risk assessment for your environmental permit' available from Gov.UK and 'H1 Risk Assessment Horizontal Guidance Note H1 Annex J – Groundwater

If you're applying to discharge as part of a groundwater remediation schemes you must send us a site-specific remediation strategy which has been agreed with the Natural Resources Wales Geoscience Team. This should include:

Conceptual model; Quantitative site-specific risk assessment; Site-specific remedial targets; Details of the contaminant concentrations contained within the proposed discharge

Upload your groundwater risk assessment

- File: Test.xlsx - [Download](#)

## Discharges onto land

#### Environmental risk assessment and modelling

You must carry out a groundwater quantitative risk assessment following the guidance in 'Groundwater risk assessment for your environmental permit' (opens in new tab). We cannot undertake assessments on your behalf, but we can offer advice as to what needs to be done through our pre-application advice service (opens in new tab). If you do not have the skills to do this yourself, then you will need to engage a consultant to advise you and to undertake the assessment. This risk assessment should be based on our guidance 'Groundwater risk assessment for your environmental permit' available from Gov.UK and 'H1 Risk Assessment Horizontal Guidance Note H1 Annex J – Groundwater

If you're applying to discharge as part of a groundwater remediation schemes you must send us a site-specific remediation strategy which has been agreed with the Natural Resources Wales Geoscience Team.

This should include:

Conceptual model; Quantitative site-specific risk assessment; Site-specific remedial targets; Details of the contaminant concentrations contained within the proposed discharge Upload your groundwater risk assessment.

- File: CW DQRA - Infiltration Addendum.pdf - [Download](#)
- File: CW DQRA\_Part 1 of 2.pdf - [Download](#)
- File: CW DQRA\_Part 2 of 2.pdf - [Download](#)

Give the discharge point a unique name, for example, 'Outlet 1' (you must use this name to identify the discharge point on the plan) and the national grid reference

	Discharge point name	National grid reference	Name of effluent discharged through this discharge point
1	SIGMA Basement Seepage	SS 93254 78123	SIGMA Basement Seepage
2	-	-	-
3	-	-	-
4	-	-	-
5	-	-	-

In what type of area will the effluent is disposed of?

**Other (please specify):**

Exposed unsurfaced ground at the site comprising a mixture of alluvium, granular fill and limestone bedrock.

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

Between 5,000 and 10,000sqm

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

No

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

No

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

No

## Site plan

You must provide a site plan for your proposed discharge which is A4 in size or larger, and at 1:1,000 scale or larger.

On your plan you must show:

which direction North is; the premises discharging effluent; the site in relation to the local area; any watercourses, wells, springs or boreholes on the site (or within 50 metres); the location of the wastewater treatment system all outlets where effluent will be discharged into the receiving environment; where samples of effluent can be taken automatically or manually (if required); where flow or quality will be measured (if required).

You may submit more than one plan if necessary.

Please upload your plan(s) below

- File: 2025\_10\_21\_Slte Location Plan Incl SIGMA Basement for NRW.pdf - [Download](#)

## How do you want to pay?

Who can we talk to you about your billing or invoice?

Same as application contact

If a new contact, please provide details:

<b>Title</b>	-
<b>First name</b>	David
<b>Last name</b>	Atkinson
<b>Address</b>	Arcadis, 80 Fenchurch Street, London
<b>Postcode</b>	EC3M 4BY
<b>Telephone</b>	01223 606184 and 07812 369202
<b>Email address</b>	David.Atkinson@arcadis.com

How do you want to pay for your application fee?

Electronic transfer (e.g. BACS)

## Paying by electronic transfer

Please provide your reference for the payment.

**Payment reference:** EPRARCAD2025

**Amount paid:** £9,802.00

## How we collect your personal data

We will process the information provided by you in line with the Data Protection legislation. For more information on how we manage, store and use your data, see our Privacy Notice (opens in new tab)

I have read and understood this information

## Freedom of Information

Under the Freedom of Information Act 2000, anybody may request information from a public authority. The Act grants two statutory rights: to be told if the public authority holds that information; and if so, to have that information communicated to you.

Find out how to request information under the Freedom of Information Act (opens in new tab).

I have read and understood this information

## Confidentiality and National Security

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. Confidential information is information that is commercially or industrially confidential in relation to any person and is unlikely to be applicable for small-scale sewage discharges.

You can ask for information in the public register to be made confidential or withheld in the interests of national security by answering the question below and provide information on the next page giving your reasons. 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.

Do you believe that for reasons of confidentiality or national security your details should not be included on the public register?

No

## Declaration

A relevant person should make the declaration. You must be a relevant person or have the authority of a relevant person to sign this application on their behalf. An agent acting on behalf of an applicant is NOT a relevant person.

Each individual (or individual trustee) who is applying for their name to appear on the permit must complete this declaration. You can send a separate document with the relevant information if there are not enough spaces to sign below.

Relevant people means each applicant, and in the case of a company, a director, manager, company secretary or any similar officer or employee listed on current appointments in Companies House. In the case of a Limited Liability Partnership (LLP), it includes any partner. If the permit holder is an organisation of individuals, each individual (or individual trustee) must complete the declaration.

To simplify and speed up the application process, we recommend that the declaration is filled in by an officer of a company or one of the partners in a Limited Liability Partnership (LLP).

If you wish a manager, employee or consultant etc. to sign the declaration on behalf of a relevant person, we will need written confirmation from a relevant person; that is, an officer of the company, a partner in the LLP or the individual, confirming that the person has the authority to fill in the declaration.

If you are joint permit holders, you should each fill in your own declaration. We have provided extra spaces for this below. Please upload a separate sheet with your application if you need more room for signatories.

Where the operator is the subject of any insolvency procedure, the declaration must be filled in by the official receiver/appointed insolvency practitioner.

I have included written confirmation from a relevant person to confirm I can sign on their behalf

Upload written confirmation here

- File: 2025\_10\_14\_Terry Sapsford Authorisation to Sign NRW Permit Application\_G Whittome.pdf - [Download](#)

If you knowingly or recklessly make a statement which is false or misleading to help you get an environmental permit (for yourself or another person), you are committing an offence under the Environmental Permitting (England and Wales) Regulations 2016.

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.

I understand that if I knowingly or recklessly make a false or misleading statement: I may be prosecuted; and if convicted, I may have to pay a fine and/or go to prison.

By signing below, you are confirming that you understand and agree with the declaration above.

<b>Title</b>	-
<b>First name</b>	Gerry
<b>Last name</b>	Whittome
<b>On behalf of (if applicable)</b>	Terry Sapsford
<b>Date (DD/MM/YYYY)</b>	22/10/2025

# Submit your application

Enter the email address you'd like a copy of your application sent to:
splant2@ford.com