# Application for an environmental permit: Part B6 - new bespoke water discharge activity and groundwater (point source) activity

## About you

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

**Title:** -

**First name:** Ian

**Last name:** Morgan

Please provide details below.

Are you applying as an individual, an organisation or group of individuals' (for example, a partnership), a company (this includes Limited Liability Partnerships) or a public body?

A registered company or other corporate body

## Registered company or other corporate body

Please provide details below

| | |
|---|---|
| **Company name** | Morganstone Homes |
| **Company registration number** | 10816699 |
| **Date of registration (DD/MM/YYYY)** | 13/06/2017 |

Contact name for the company

| | |
|---|---|
| **Title** | - |
| **First name** | Ian |
| **Last name** | Morgan |
| **Email address** | Ian.morgan@morganstone.co.uk |

## Your address

For companies this must be the address on record at Companies House.

| | |
|---|---|
| **Address** | Morganstone House, Llys Aur<br>Llanelli Gate, Llanelli<br>- |
| **Postcode** | SA14 8LQ |
| **Telephone** | 01554779126 |
| **Email address** | mail@morganstone.co.uk |

Agent or others acting on behalf of the applicant.

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

| | |
|---|---|
| **Title** | - |
| **First name** | Julian |
| **Last name** | Gregory |
| **Address** | EcoVigour Ltd, Hardwick Farm<br>Five Lanes,<br>Caerwent |
| **Postcode** | NP26 5PH |
| **Telephone** | 08448400401 |
| **Email address** | jgregory@ecovigour.com |

## 1 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.

A request for Pre-application advice was made on the 25/11/21 Ref WPCC11396, advice has not yet been received. The site where the permit is to be used has been subject to an Improvement Notice due to silt contamination of runoff and one of the actions arising from this was that the site should gain an Environmental Permit to Discharge, so that if it was required to use a flocculant / coagulant dosing system, this could be implemented. The NRW representative dealing with this is Anna Wilmshurst (anna.wilmshurst@cyfoethnaturiolcymru.gov.uk)

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

No

## Where will you be discharging?

Please complete

**Site name** Parc Eirin

**Address** Tonyrefail

Porth

**Postcode** CF39 8WA

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/

SS 99405 87738

## About the effluent

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

The effluent will be surface rain water runoff from the site, which will have been subjected to primary gravity settlement in ponds and then treatment with Sodium Hydroxide to adjust the pH to the 6 - 9 (assuming that the pH of the incoming water is not already within these parameters)A Ferric / PAC Coagulant and a Flocculant is then added via a flow proportional dosing and mixing system, before the water passes through a Lamella Clarifier for secondary settlement. Water will then be discharged into a below ground SDS Crate attenuation system which is discharged into the Nant Eirin via a hydrobrake flow control device to maintain discharge rates below greenfield runoff rates.

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.

Treated Surface Runoff

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 – rainfall dependent (such as site drainage)

## Trade – rainfall dependent: 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.

* 15/01/2022

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.**
31/12/2023

## Trade – rainfall dependent: could your discharge be made to sewer?

How far away is the nearest foul sewer from the boundary of the premises (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 sewage treatment facility and the nearest foul sewer and/or private sewer.

200m

To assess if it is reasonable to discharge your effluent to foul sewer:

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

| | Number of domestic properties served by the sewage treatment system | Multiplied by 30 metres |
|---|---|---|
| **Domestic properties** | 60 | 1800 |

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 |
|---|---|---|---|
| **All other premises** | 0 | 0 | 0 |

If your answer to the above question is greater than the distance to the nearest foul sewer you must explain why you cannot discharge your effluent into the foul sewer.

You must send us evidence that you have approached the sewerage undertaker or owner(s) of the private sewer to reach an agreement for a connection to the foul sewer and send us their formal response regarding connection

**Please provide your explanation below:**
As the effluent is surface runoff, it will be discharged at volumes which are likely to render the foul sewerage line, over capacity.

## Trade – rainfall dependent: How much do you want to discharge?

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

600

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

7

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

The maximum throughput for the Siltbuster system is 40m3/h, however from experience we know that the system will not operate effectively above 25m3/h and is generally lower. As a worst case we have used 25m3/h operating over a 24hr period. i.e. 25m3/h x 24hr = 600m3/day
25m3/h x 1000 = 25,000l/h / 3600 = 6.94l/s

## Trade - rainfall dependent: How will the effluent be treated?

Do you treat your effluent?

Yes

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** | 10 Lagoon |
| **Second treatment** | 29 Settlement |
| **Third treatment** | 04 Chemical |
| **Fourth treatment** | 29 Settlement |

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: Parc Eirin - Siltbuster Environmental Risk Assessment.pdf - Download
- File: Parc Eirin - Siltbuster Environmental Risk Assessment Appndix 2.pdf - Download

## Trade – rainfall dependent: 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.

Yes

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

No

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

| Give the maximum temperature of your discharge in degrees Celsius |
| --- |
| Ambient |

## Trade – rainfall dependent: Monitoring arrangements

| Please provide the 12 character national grid reference of the final effluent sample point.<br><br>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.<br><br>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 |
| --- |
| SS 99438 87742 |

| Do you have a UV disinfection efficacy monitoring point?<br><br>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?<br><br>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 |
| --- |
| SS 99412 87732 |

| Does the flow monitor have an MCERTS certificate? |
| --- |
| No |

## Your management systems

| What management system will you provide for your regulated facility? |
| --- |
| ISO 14001 |

| 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: SY-ML-001-Business-Management-System-Manual.pdf - Download
- File: SY-CT-003-ISO-140012015-Environment-Certificate.pdf - Download

## Where will the effluent discharge to?

Where will the effluent discharge to?

Non-tidal river, stream or canal

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:**
All of the products to be used within the treatment process are approved for use within the aquatic environment and have been used extensively, for the same application, utilising the same flow proportional dosing system we are proposing to use.

## Discharges to non-tidal river, stream or canal

Give the discharge point a unique name For example, ‘Outlet 1’ (you must use this name to identify the discharge point on the plan), the national grid reference and the name of the watercourse, canal or the main watercourse it is a tributary of if you know it

| | Discharge point name | National grid reference | Watercourse name | Name of effluent discharged through this discharge point |
|---|---|---|---|---|
| 1 | Discharge 2 | SS 99291 87746 | Nant Eirin | Treated Surface Runoff |
| 2 | - | - | - | - |
| 3 | - | - | - | - |
| 4 | - | - | - | - |
| 5 | - | - | - | - |

Is the discharge into a

Stream

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

Yes

**If yes, give the national grid reference where the discharge enters the surface water sewer:**
SS 99302 87767

Does the watercourse dry up for part of the year?

Effluent should discharge to watercourses which flow all year. Discharging to a dry watercourse may cause the effluent to pond and cause other environmental or amenity issues”

No

Environmental risk assessment and modelling

Have you carried out any river quality modelling? Read the 'Surface water pollution risk assessment for your environmental permit' guidance available on Gov.UK to determine if you need to provide this modelling.

No

## Site plan

You must provide a site plan for your proposed discharge which is A4 in size or larger, and at 1:10,00 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: Drg No 248 - Parc Eirin Water Control Layout.pdf - Download

## Application fee

Summary of charges

| | Type of water discharge activity or groundwater activity | Standard or reduced charge | Number of activities at this charge rate | Charge for each facility (£) | Charges due (£) |
|---|---|---|---|---|---|
| | Surface Water | Standard | 1 | 885 | 885 |
| | - | - | - | - | - |
| | - | - | - | - | - |
| | - | - | - | - | - |
| | - | - | - | - | - |
| **Other charges** | - | - | - | - | - |
| **Total charges due** | - | - | - | - | 885 |

## How do you want to pay?

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

Same as application contact

How do you want to pay for your application fee?

Electronic transfer (e.g. BACS)

## How we collect your personal data

I have read and understood this information

Yes

## Freedom of Information

I have read and understood this information

Yes

## Declaration

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.

| | |
|---|---|
| **Title** | - |
| **First name** | Ian |
| **Last name** | Morgan |
| **On behalf of (if applicable)** | - |
| **Date (DD/MM/YYYY)** | 06/12/2021 |