

# Application to change an environmental permit: Part C6 - new bespoke water discharge activity and groundwater (point source) activity

## About you

Tell us the permit number for the environmental permit you want to change. The permit number may also be referred to as your 'consent number' or your 'authorisation number' in documents that have been issued before April 2010.

CG0129201

Tell us who is making the application to change this permit.

**First name:** James

**Last name:** Camis

**Address:** Kinmel Park Depot, Royal Welch Avenue, Bodelwyddan, Denbighshire,

**Postcode:** LL18 5TQ

**Telephone:** 07557 259676

**Email:** james.camis@dwrcymru.com

Only the permit holder(s) or somebody authorised to act on their behalf can change the permit.

Are you the permit holder or somebody who is authorised to act on their behalf?

Yes

## 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

## 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.

Minor exchange of emails has occurred between myself and Joanne Fitton at NRW on this permit application and a few others at the same time.

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

Yes

If yes please tell us what has changed

To date discussions have centred on the discharge being in excess of 25m<sup>3</sup>/day, as such the application fee of £4,976.00 was paid under payment ref: 'RFP02200-1900201827: RFP Abergynolwyn'. In a reassessment of the volumes generated by the in-line water quality analysers we are actually not requiring to discharge such a high volume - it will be a maximum of 17.3 m<sup>3</sup>/day, therefore we fit into a lower charging band. At some point a partial refund will have to be arranged.

## What do you need to change?

Complete one

I need to make technical changes to my permit

## Tell us about your proposed technical change

There are three different types of technical change you can make to a permit: minor, normal and substantial.

Minor variation

For changes which need some technical input from NRW, for example applications to: Reduce the volume of discharge where no review of existing substances or habitats assessment is required Normal Variation

For changes requiring technical input from NRW, for example applications to Change outlet location which requires a review of any existing substance or habitat assessment Change the volume or the quality (or content) of a discharge and no new assessment of emission limits for specific substances is needed. Substantial variation

Where a significant assessment is required, including: Change the volume or change the quality of a discharge and a new assessment of emissions limits for specific substances is needed Specific substances are: Hazardous pollutants for water discharge activities Hazardous substances or non-hazardous pollutants for groundwater activities Please give us details of the proposed technical change in the box below:

To increase the maximum daily volume and vary the description from the current 'Trade Effluent' to 'Water Treatment Works Trade Effluent comprising inline water quality analyser, filter wash and emergency run to waste'

What type of change is this?

Normal

## Where will you be discharging?

Please complete

**Site name** Abergynolwyn Water Treatment Works

**Address** Abergynolwyn WTW, off the B4405,  
Abergynolwyn, Tywyn, Gwynedd,

**Postcode** LL36 9UW

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/>

SH 67127 06461

## About the effluent

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

The raw water source for the Abergynolwyn WTW is Tal y Llyn Springs. As a groundwater source very little treatment is required. With the WTW building measuring 4.3m x 6.6m and a small supply network, treatment merely comprises Chlorine disinfection; a pressure filter; UV disinfection and an Amazon Filter prior to water entering the final water tank and then into distribution. The discharges required to be made to the adjacent watercourse are as follows:

Analyser Waste - continuous  
Filter wash - intermittent  
RTW - intermittent

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.

Water Treatment Works Trade Effluent comprising inline water quality analyser, filter wash and emergency run to waste

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 – known volume (including process effluents, wash waters, close circuit cooling waters, boiler blowdown, filter backwash, pumped mine water)

## Trade – known volume: 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.

\* 01/04/2024

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?

Yes

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.

670m

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
<b>Your premises</b>	670	893.33	26800

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

Yes

### Trade – known volume: How much do you want to discharge?

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

17.3

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

9.14

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 rate of abstraction from the spring is 2.3 l/s, the maximum rate of water that we put into the distribution network is 1.5l/s at peak times, this is averaged through the day to 0.75l/s – these are very low flows and volumes. The discharges required to be made to the adjacent watercourse are as follows:

In-line water quality analyser waste (continuous discharge) - The analysers require a flow between the range of 250-750 ml/min. With x11 analysers on site, the daily volumetric discharge from each analyser range between 0.36 - 1.08m<sup>3</sup>.

250 ml/min \* 60 = 15 l/hr, 15 l/hr \* 24 = 360 litres/day (0.36m<sup>3</sup>/day \* 11 analysers = 3.96 m<sup>3</sup>)

750 ml/min \* 60 = 45 l/hr, 45 l/hr \* 24 = 1080 litres/day (1.08m<sup>3</sup> \* 11 analysers = 11.88 m<sup>3</sup>)

Maximum = 11.88 m<sup>3</sup>/day @ 0.14 l/s

Filter Wash (intermittent discharge) - The filter wash rate is 6 - 8 l/s dependent on the level of the final water tank during the wash (the wash rate is dependent upon the pressure provided from the final tank TWL). 8 ls (4mins) = 1.92m<sup>3</sup>.

8 ls \* 60 = 490 l/min 490 l/min \* 4 = 1,920 litres (1.92m<sup>3</sup>)

The filter drains down to wash level. The total volume of the filter is ~1.5m<sup>3</sup>, a small proportion is drained, and the remaining volume is retained within the filter.

Filter wash = 1.92m<sup>3</sup> Filter drain down = ~0.5m<sup>3</sup>

Maximum = 2.42 m<sup>3</sup>/day @ 8 l/s

RTW (intermittent discharge) = 3 m<sup>3</sup> based on the production volume of the works RTW for 1hr but rounded up to the nearest m<sup>3</sup> in case of additional flushing/time for WQ parameters to settle and time to conduct valving. 3 m<sup>3</sup>/hour would equate to 0.83333 l/s round this up to 1 l/s

Maximum = 3 m<sup>3</sup>/day @ 1 l/s

Under worse case conditions in one 24hr period with the WQ analysers running continuously at maximum, a filter wash occurring and an emergency RTW we would be looking at the below maximum volume and flow rates:

Analysers = max. 11.88 m<sup>3</sup>/day @ max. 0.14 l/s

Filter wash = max. 2.42 m<sup>3</sup>/day @ max. 8l/s

RTW = max 3.0 m<sup>3</sup>/day @ max. 1 l/s

TOTAL = max. 17.3 m<sup>3</sup>/day @ max. 9.14 l/s

## Trade – known volume: How will the effluent be treated?

Do you treat your effluent?

Yes

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

The WTW treats water for public consumption, whilst the below treatments occur the only treatment specific to making this discharge is that we dechlorinate it. The discharge is of dechlorinated drinking water.

There has been much discussion on Run to Waste Discharges with NRW. Part of the agreement to permitting them was that we operate the discharge under an Operating Technique as such the attached Abergynolwyn WTW RTW Environmental Reporting and Monitoring Operating Technique.docx has been developed.

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	04 Chemical
Second treatment	03 Filtration tertiary
Third treatment	18 Chlorination
Fourth treatment	20 Dechlorination

#### 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: Abergynolwyn WTW RTW Environmental Reporting and Monitoring Operating Technique.docx - [Download](#)

## Trade – known volume: 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?

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 – known volume: 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)

SH 67135 06466

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

If yes, provide the 12 digit national grid reference for the pre and post UV monitoring locations:

**Pre UV treatment** NA

**Post UV treatment** NA

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)

NA

Does the flow monitor have an MCERTS certificate?

No

**If yes, please give the certificate number:**

NA

## 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

## 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?

No

## 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	Effluent Discharge Point	SH 67202 06515	Tributary of Nant Gwernol	Water Treatment Works Trade Effluent comprising inline water quality analyser, filter wash and emergency run to waste
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?

No

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

If the changes you're making involve moving outlets or updating grid references for your activities, you will need to provide an updates site plan.

The site plan should be 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: CG0129201 Abergynolwyn WTW – Site Plan.pdf - [Download](#)

## 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)

## Paying by electronic transfer

Please provide your reference for the payment.

<b>Payment reference:</b>	DCWW0104431903 there will be 3 payments there, 2 of £806.00 and this one of £4976.00
<b>Amount paid:</b>	£4976.00

## 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.

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: 2023.03.22 - Nicola Foreman NRW letter of authorisation for permitting matters.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>	James
<b>Last name</b>	Camis
<b>On behalf of (if applicable)</b>	Dwr Cymru Cyfyngedig
<b>Date (DD/MM/YYYY)</b>	27/03/2024

## Submit your application

Enter the email address you'd like a copy of your application sent to:

james.camis@dwrcymru.com