

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Dŵr Cymru Cyfyngedig

Crynant Sewage Treatment Works
Track Off Neath Road (A4109)
Crynant
Neath
SA10 8SG

Variation application number

PAN-018670

Permit number

BA2001101

Crynant Sewage Treatment Works

Permit number BA2001101

Introductory note

This introductory note does not form a part of the notice.

The following notice gives notice of the variation and consolidation of environmental permits BA2001101 and BP0269101 referred to in the status logs below and the replacement of those permits with a consolidated environmental permit.

This permit variation and consolidation is to reflect asset improvements that have been agreed between the Natural Resources Wales and Dŵr Cymru Cyfyngedig as part of the National Environment Programme. This permit requires the operator to install overflow operation monitoring into storm storage, MCERTS flow monitoring to record flow passed forward and discharge operation monitoring on the settled storm discharge. Compliance assessment against flow passed forward and overflow operation into storm storage will be carried out for the first full calendar year after both outputs have been claimed and all subsequent calendar years

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number. It is not backdated before 6 April 2010.

Status log of permit A: BA2001101

Description	Date	Comments
Application PAN-018670 (Variation and consolidation)	Duly made 09/12/2022	Variation of permit initiated under PR19 review programme to incorporate improvements to be delivered under AMP7.
Variation determined BA2001101	25/05/2023	Varied and consolidated permit issued in modern condition format to Dŵr Cymru Cyfyngedig.

Status log of permit B: BP0269101

Description	Date	Comments
Regulator-initiated variation Application PAN-008713	Duly Made 01/12/2019	AMP programme EDM variation.
Variation Issued BP0269101	26/02/2020	Varied permit issued to Dŵr Cymru Cyfyngedig.
Application PAN-018670 (Variation and consolidation)	Duly made 09/12/2022	Consolidation of settled storm overflow discharge into permit BA2001101.
Variation determined BA2001101	25/05/2023	Varied and consolidated permit issued to Dŵr Cymru Cyfyngedig.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Natural Resources Body for Wales (“Natural Resources Wales”) in exercise of its powers under regulations 18 and 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies and consolidates

permit numbers

BA2001101

BP0269101

issued to

Dŵr Cymru Cyfyngedig (“the operator”)

whose registered office is

Linea

Fortran Road

St Mellons

Cardiff

CF3 0LT

company registration number **02366777**

to operate a water discharge activity at

Crynant Sewage Treatment Works

Track Off Neath Road (A4109)

Crynant

Neath

SA10 8SG

to the extent set out in the schedules.

The notice shall take effect from 25/05/2023

The number of the consolidated permit is BA2001101.

Name

Date

Emma Jones	25/05/2023
-------------------	-------------------

Authorised on behalf of Natural Resources Wales

Schedule 1

All conditions have been varied by the consolidated permit as a result of a Natural Resources Wales initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

BA2001101

This is the consolidated permit referred to in the variation and consolidation notice for application PAN-018670 authorising,

Dŵr Cymru Cyfyngedig (“the operator”),

whose registered office is

Linea

Fortran Road

St Mellons

Cardiff

CF3 0LT

company registration number **02366777**

to operate a water discharge activity

Crynant Sewage Treatment Works

Track Off Neath Road (A4109)

Crynant

Neath

SA10 8SG

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Emma Jones	25/05/2023

Authorised on behalf of Natural Resources Wales

Conditions

Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of the permit.

Operations

2.1 Permitted activities

2.1.1 The only activities authorised by the permit are the activities specified in schedule 1 table S1.1.

2.2 The site

2.2.1 The discharge activities shall take place at the discharge points marked on the site plans at schedule 7 to this permit, and as listed in table S3.2; and, the operating techniques that are the subject of conditions prefixed by 2.3 shall be applied at the locations shown, or otherwise described, in schedule 7.

2.3 Operating techniques

2.3.1 For the activity (A1), referenced in schedule 1, table S1.1, the operator shall comply with the relevant requirements of the Urban Waste Water Treatment (England and Wales) Regulations 1994.

2.3.2 For the discharge(s) specified in table S3.3:

- (a) The discharge shall only occur when and only for as long as the flow passed forward is equal to or greater than the overflow setting indicated due to rainfall and/or snow melt.
- (b) Off-line storm storage must be fully utilised before a discharge occurs. It shall only fill when the flow passed forward is equal to or greater than the overflow setting indicated due to rainfall and/or snow melt and shall be emptied and its contents returned to the continuation flow as soon as reasonably practicable. The minimum off-line storm storage required is specified in table S3.3.
- (c) On-line storm storage must be fully utilised before a discharge occurs. It shall only fill with the excess flows due to rainfall and/or snow melt. The storage shall be emptied and its contents returned to the continuation flow as soon as reasonably practicable. The minimum on-line storm storage required is specified in table S3.3.
- (d) The discharge shall not be comminuted or macerated and shall have passed through screens as specified and shall not contain a significant quantity of solid matter with a particle size greater than any indicated. All screenings shall be removed from the discharge.
- (e) Where a mechanically cleaned screen is installed, a telemetry alarm system shall be installed and maintained so as to give the operator immediate notification of a failure of the

screen cleaning mechanism, unless otherwise agreed in writing by Natural Resources Wales. The operator shall take all appropriate measures to return the screen cleaning mechanism to normal operation as soon as reasonably practicable after receipt of notification of the failure.

2.4 Improvement programme

2.4.1 For the activity A2, the flow passed forward monitoring readings required by condition 3.3.1 and tables S3.1 and S3.4 must be taken every two minutes where:

- (a) the overflow is directly pumped to a storm tank, unless otherwise agreed in writing by Natural Resources Wales; or
- (b) the operator has received the written agreement of Natural Resources Wales to move to monitoring every two minutes from a specified date; or
- (c) From 31 March 2026, unless another date is agreed in writing by Natural Resources Wales, the flow passed forward monitoring readings required by condition 3.3.1 and tables S3.1 and S3.4 must be taken every two minutes unless the operator can demonstrate there are sufficient 15-minute readings to assess compliance with the flow passed forward limit in table S3.1.

Emissions and monitoring

3.1 Emissions to water

3.1.1 The limits given in schedule 3 table S3.1 shall not be exceeded.

3.1.2 The limits in schedule 3 table S3.1 to which this condition applies may be exceeded where: in any series of samples of the discharge taken at regular but randomised intervals in any period of twelve consecutive months as listed in column 1 of schedule 3A, no more than the relevant number of samples, as listed in column 2 of schedule 3A, exceed the applicable limit for that relevant parameter. For relevant parameters subject to schedule 3C the assessment is based on a fixed calendar year from 1 January to 31 December inclusive.

3.1.3

- (a) For the emission limits in schedule 3 table S3.1 to which this condition applies, no sample of the discharge taken at a time when unusual weather conditions are adversely affecting the operation of the waste water treatment works, shall be taken into account in deciding whether or not the emission limit has been complied with.
- (b) On any occasion where unusual weather conditions adversely affect the operation of the waste water treatment works, the operator shall use its best endeavours to mitigate that adverse effect.
- (c) For any sample of the discharge taken to be considered for the purposes of (a) above, the operator shall notify Natural Resources Wales in writing within 14 days of becoming aware that an emission limit has been exceeded. That notification shall include a full description of the unusual weather conditions and their impact on the operation of the works.

3.1.4

- (a) For the emission limits in schedule 3 table S3.1 to which this condition applies, no sample of the discharge taken at a time when abnormal operating conditions are adversely affecting the operation of the waste water treatment works, shall be taken into account in deciding whether or not the emission limit has been complied with.
- (b) On any occasion where abnormal operating conditions adversely affect the operation of the waste water treatment works, the operator shall use its best endeavours to mitigate that adverse effect.
- (c) For any sample of the discharge taken to be considered for the purposes of (a) above, the operator shall notify Natural Resources Wales in writing within 14 days of becoming aware

that an emission limit has been exceeded. That notification shall include a full description of the abnormal operating conditions and their impact on the operation of the works.

3.1.5 The permitted Dry Weather Flow limit in schedule 3 table S3.1 is set at the operator's planned annual 80% exceeded daily volume discharged.

- (a) For compliance purposes an exceedance shall be recorded for a calendar year only when the limit in effect on 31 December of that calendar year is exceeded by 90% or more of the 'good' recorded Total Daily Volumes in that calendar year.
- (b) Until 1 January 2026
 - (i) If an exceedance of the Dry Weather Flow limit is recorded in a calendar year then the operator shall, as soon as is practicable, investigate the reasons for the exceedance.
 - (ii) The operator shall report the reasons for the exceedance to Natural Resources Wales and the steps that it proposes to take to restore compliance.
 - (iii) An exceedance of the Dry Weather Flow limit shall not be recorded as a failure of the Dry Weather Flow limit in that calendar year if the operator takes appropriate steps to restore compliance.

- (c) From 1 January 2026

The limit has been complied with in an assessment calendar year unless;

- (i) the limit was exceeded in the compliance assessment calendar year and,
- (ii) two or more exceedances have occurred in the preceding 4 calendar years.

Only exceedances from a calendar year after 31 December 2023 shall be used.

3.1.6 At least 95% of all flow passed forward readings taken in any calendar year while the overflow to storm tank is operating must be equal to or greater than 92% of the flow passed forward limit specified in schedule 3 table S3.1.

- (a) For the purpose of this condition the following readings shall not be used in the assessment.
 - (i) data that is not 'good' data; or
 - (ii) flow readings taken within 30 minutes after the start of each overflow event; or
 - (iii) Readings taken when the overflow to the storm tank is operating to facilitate regular planned maintenance, non-routine planned maintenance or non-routine un-planned maintenance, subject to the written agreement of Natural Resources Wales; or
 - (iv) Readings taken when the overflow to the storm tank is operating as a result of a discharge which another person caused or knowingly permitted to be made into the sewer or works, and the operator either was not bound to receive the discharge into the sewer or works or was bound to receive it there subject to conditions which were not observed, and the operator could not reasonably have been expected to prevent the discharge into the sewer or works, subject to the written agreement of Natural Resources Wales.
- (b) For any readings to be considered by Natural Resources Wales for the purposes of 3.1.6 (a) (iii) above,
 - (i) the regular planned maintenance, non-routine planned maintenance or non-routine un-planned maintenance must not have resulted in a discharge from the storm tank(s); and
 - (ii) the storm tank(s) must have been emptied as soon as reasonably practicable and before any further overflow into them occurs; and
 - (iii) the operator must have pre-scheduled the regular planned maintenance and included it in a maintenance programme available for inspection upon request by Natural Resources Wales; and
 - (iv) the operator must have notified Natural Resources Wales in writing at least 5 working days before commencing any non-routine planned maintenance and, within 14 days of completing the non-routine planned maintenance, have submitted a full description of its impact on the operation of the storm tank(s) to Natural Resources Wales; and

- (v) the operator must have notified Natural Resources Wales before commencing any non-routine un-planned maintenance and, within 14 days of completing the non-routine un-planned maintenance, have submitted a full description of the work carried out and its impact on the operation of the storm tank(s) to Natural Resources Wales; and
- (vi) the non-routine un-planned maintenance was not required to be carried out due to the act or default of the operator, its agents, representatives, officers, employees or servants
- (c) For any readings to be considered for the purposes of 3.1.6 (a) (iv) above, the operator must have notified Natural Resources Wales as soon as reasonably practicable and must have used their best endeavours to minimise any adverse impact on the operation of the storm tank(s).
- (d) Records demonstrating that the requirements of 3.1.6 (a), (b) and (c) above have been met shall be maintained

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 For the activity (A1), referenced in schedule 1, table S1.1, the operator shall take appropriate measures to minimise so far as reasonably practicable the polluting effects of the emissions of substances in the discharge not controlled by emission limits (excluding odour).

3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and S3.4;
 - (b) inlet quality specified in tables S3.1 and S3.4.
- 3.3.2 The operator shall maintain records of all monitoring required by this permit.
- 3.3.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales.
- 3.3.4 Accessible monitoring points shall be provided and maintained to enable the emissions monitoring programme and the environmental or other monitoring to be carried out at the monitoring points specified in table S3.4 of schedule 3 and shown marked on the site plans in schedule 7.
- 3.3.5 The monitoring programme for the parameters subject to schedule 3B shall be:
- (a) pre-scheduled to cover a calendar year and the programme recorded before the start of a calendar year sample period; and
 - (b) samples collected at approximately equal intervals during the year, including samples from different days of the week and different times. Approximately 10% of samples should be outside the normal sampling window which is 9am-3pm, Monday to Friday.
- 3.3.6 After becoming aware, or following a notification that a sample has not been taken on the schedule 3B Monitoring Programme pre-scheduled date, or is lost, or a result for that sample cannot be reported, the operator shall record the details and reschedule the sample.
- 3.3.7 The monitoring programme for the parameters subject to schedule 3C shall be:
- (a) pre-scheduled before each calendar year;
 - (b) Unless otherwise agreed in writing by Natural Resources Wales, the operator shall submit the monitoring programme for the following calendar year to Natural Resources Wales before the 1st of December; and
 - (c) samples must be collected at approximately equal intervals during the year from different days of the week and approximately 10% of samples should be taken at weekends.
- 3.3.8 Unless otherwise agreed in writing by Natural Resources Wales, after becoming aware, or following notification that a sample has not been taken on the schedule 3C Monitoring Programme pre-scheduled date, or is lost, or a result for that sample cannot be reported, the operator shall notify

Natural Resources Wales of the missed even and the reschedule date as soon as reasonably practicable.

- 3.3.9 The Operator shall take appropriate measures to ensure that the event recorder remains fully operational at all times within the reference period specified in table S3.1. Any failures shall be remedied as soon as reasonably practicable.

3.3.10

- (a) Total Daily Volumes shall be calculated from the average of the available 'good' 15-minute flow readings taken from midnight to midnight where;

$$\text{Total Daily Volume (m3)} = \{\text{Sum of 'good' readings (l/s)} / \text{number of 'good' readings}\} \times \{86,400 \text{ (s)} / 1000\}.$$

Where there are 87 or more 'good' 15-minute flow readings the Total Daily Volume shall be reported as 'good', where there are 1 – 86 'good' readings it shall be reported as 'suspect' and where there are no 'good' readings as 'missing'.

- (b) The operator shall record all failures of the flow measurement system and any other breaks in the flow record and the reasons for all issues, failures and breaks that lead to missing or suspect Total Daily Volume records and all steps taken to prevent a re-occurrence.
- (c) There shall be no more than 37 days and/or no more than 14 consecutive days with 'suspect' or 'missing' Total Daily Volumes in a calendar year, unless otherwise agreed in writing by the Natural Resources Wales.
- (d) All 15-minute flow readings shall be flagged as 'good', 'suspect' or 'missing' using an appropriate methodology set out in the operator's flow monitoring quality management system.

- 3.3.11 The operator shall, for the flow passed forward and overflow operation monitoring required by condition 3.3.1 and table S3.1 to assess 'flow passed forward' limit compliance:

- (a) have appropriate systems in place that allow them to detect and record all issues and failures of the monitoring systems, and any other breaks in the data; and
- (b) flag all monitoring data as 'good', 'suspect' or 'missing' using an appropriate methodology set out in the operator's quality management system; and
- (c) where 'good' flow or overflow operation monitoring data is not recorded for at least 90% of a day the operator shall as far as is reasonably practicable determine and record the reasons why and the steps taken to prevent a re-occurrence; and
- (d) The operator shall take all reasonable measures to return the flow and/or overflow operation monitoring equipment to normal operation as soon as reasonably practicable after becoming aware of a failure.

- 3.3.12 For the flow and overflow operation monitoring required by condition 3.3.1 and table S3.1 to assess 'flow passed forward' compliance, and unless otherwise agreed in writing by Natural Resources Wales, there shall be:

- (a) no more than 14 consecutive days in any calendar year where 'good' flow data are recorded for less than 90% of each day; and
- (b) no more than 14 consecutive days in any calendar year where 'good' overflow operation data are recorded for less than 90% of each day; and
- (c) no more than 37 days in any calendar year that do not have both 'good' flow data recorded for at least 90% of each day and 'good' overflow operation data recorded for at least 90% of each day.

- 3.3.13 The flow passed forward monitoring specified in table S3.1:

- (a) shall be capable of recording the flow passed forward with a total uncertainty within +/- 8% at the overflow setting specified in table [S3.3]; and
- (b) shall have its total uncertainty assessed as soon as reasonably practicable following MCERTS certification or recertification and in addition whenever a significant change occurs that may impact the total uncertainty; and

- (c) all assessment reports confirming the total uncertainty shall be retained for at least six years and provided to Natural Resources Wales within 28 days unless otherwise agreed in writing by Natural Resources Wales.

Information

4.1 Records

4.1.1 All records required to be made by schedule 3, 4 and 5 to this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by Natural Resources Wales, for at least 10 years from the date when the records were made.

4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plan and management system required to be maintained by this permit.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.

4.2.2 Within the time period after the end of the reporting period specified in schedule 4 table S4.1 the operator shall, unless otherwise agreed in writing by Natural Resources Wales, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and monitoring points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.3 On request, the Operator shall supply Natural Resources Wales with written details of individual spill events.

4.3 Notifications

4.3.1 Natural Resources Wales shall be notified as soon as reasonably practicable following detection, within the site of the regulated facility of:

- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution; and
- (b) any breach of a limit specified in schedule 3 table S3.1 (including individual exceedances of limits which are covered by condition 3.1.2).

Any other significant adverse environmental effects, which may have been caused by the activity, shall also be notified to Natural Resources Wales as soon as reasonably practicable following detection.

4.3.2 The information provided under condition 4.3.1 shall be supported by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 Where Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling specified in schedule 3B/3C, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take

place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.

- 4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

- 4.3.5 For the activity (A1), referenced in schedule 1, table S1.1, where the operator proposes to make a change in the nature of the activity by increasing the concentration of, or the addition of, or allowing the introduction of, a substance to the activity to an extent that the operator considers could have a significant adverse environmental effect on the receiving waters, and the change is not permitted by emission limits specified within schedule 3 table S3.1 or the subject of an application for approval under the EP Regulations or under the terms of this permit:

- (a) Natural Resources Wales shall be notified in writing at least 14 days before the increase or addition or allowing the introduction; and
- (b) the notification shall contain a description of the proposed change.

- 4.3.6 For the activity (A1), referenced in schedule 1, table S1.1, the operator shall inform Natural Resources Wales in writing of any change, or proposed change, to the population equivalent such as would make a material change to the application of the Regulations and shall, on request, inform the Natural Resources Wales in writing of the actual population equivalent.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "as soon as reasonably practicable", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 Activities		
Activity reference	Description of activity	Limits of specified activity
A1	Discharge of secondary treated sewage effluent via Final Effluent Discharge Point	N/A
A2	Discharge of settled storm sewage via Settled Storm Discharge Point	N/A

Schedule 2 – Waste types, raw materials and fuels

Schedule 2 not in use.

Schedule 3 – Emissions and monitoring

Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Effluent(s) and discharge point(s)	Parameter	Limit (including unit)	Reference Period	Limit of effective range	Monitoring frequency	Compliance Statistic
A1 Secondary treated sewage effluent via Final Effluent Discharge Point	Dry weather flow	4520 m ³ /day	Total daily volume	N/A	Continuous	Conditions 3.1.5 and 3.3.10 apply
	15-minute instantaneous or averaged flow	No limit set. Record as l/s	15 minutes	N/A	Continuous	N/A
	ATU-BOD as O ₂	10 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	ATU-BOD as O ₂	38 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Suspended solids (measured after drying at 105°C)	15 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	Suspended solids (measured after drying at 105°C)	44 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Ammoniacal nitrogen (expressed as N)	5 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	Ammoniacal nitrogen (expressed as N)	20 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)
	Visible oil or grease	No significant trace present so far as is reasonably practicable	Instantaneous (visual examination)	N/A	N/A	No significant trace (Condition 3.1.3 applies)

Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements

Effluent(s) and discharge point(s)	Parameter	Limit (including unit)	Reference Period	Limit of effective range	Monitoring frequency	Compliance Statistic
	ATU-BOD as O ₂ (UWWTR)	Minimum of 70 % removal compared to influent	24-hour composite	To be compliant a sample has to meet the 70% removal standard or the 25 mg/l limit not both	As specified in schedule 3C	Look up table (Conditions 3.1.2 and 3.1.4 apply)
	ATU-BOD as O ₂ (UWWTR)	25 mg/l				
	ATU-BOD as O ₂ (UWWTR)	50 mg/l	24-hour composite	This limit does not apply if a sample has met the 70% removal standard	As specified in schedule 3C	Maximum (Condition 3.1.4 applies)
	COD as O ₂ (UWWTR)	Minimum of 75 % removal compared to influent	24-hour composite	To be compliant a sample has to meet the 75% removal standard or the 125 mg/l limit not both	As specified in schedule 3C	Look up table (Conditions 3.1.2 and 3.1.4 apply)
	COD as O ₂ (UWWTR)	125 mg/l				
	COD as O ₂ (UWWTR)	250 mg/l	24-hour composite	This limit does not apply if a sample has met the 75% removal standard	As specified in schedule 3C	Maximum (Condition 3.1.4 applies)
A2 Settled storm sewage via Settled Storm Discharge Point	Discharge start and end times	N/A	N/A	Condition 3.3.3 does not apply	Whenever a discharge occurs	N/A
	Block-counted spills	N/A	1 st January to 31 st December inclusive	Condition 3.3.3 does not apply	15 minutes	N/A
	Event duration monitoring status (operational / not operational)	N/A	N/A	Condition 3.3.3 does not apply	15-minute until monitor is replaced. 2-minute once monitor is replaced.	N/A

Table S3.1 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements

Effluent(s) and discharge point(s)	Parameter	Limit (including unit)	Reference Period	Limit of effective range	Monitoring frequency	Compliance Statistic
	Flow passed forward	90 l/s	15-minute except where 2-minute required by condition 2.4.1	N/A	Continuous 15-minute instantaneous or averaged flow except where 2-minute required by 2.4.1	Minimum Condition 3.1.6 applies
	Overflow operation (into storm storage) monitoring yes/no or start and end times	N/A	N/A	N/A	2-minute where yes/no or whenever overflow operates where start and end times	N/A
	Overflow operation (into storm storage) monitoring status (operational / not operational)	N/A	N/A	N/A	2-minute or whenever operational status changes	N/A

Table S3.2 Discharge points

Effluent Name	Discharge Point	Discharge point NGR	Receiving water/Environment
A1 Secondary treated sewage effluent	Final Effluent Discharge Point	SN 78896 03871	River Dulais
A2 Settled storm sewage	Settled Storm Discharge Point	SN 78896 03871	River Dulais

Table S3.3 Storm sewage discharge settings

Effluent(s) and discharge point(s)	Description of discharge	Overflow setting l/s	Maximum size of solid matter	Screen aperture size	Minimum screen capacity flow l/s	Minimum storage capacity m ³ (off-line)
A2 Settled storm sewage via Settled Storm Discharge Point	Settled storm sewage	90	No greater than 6 mm in more than 1 dimension	6 mm x 6 mm	The screen shall be designed to cope with all flows up to and including the 1 in 5 year storm return period, as a minimum	480

Table S3.4 Monitoring points			
Effluent(s) and discharge point(s)	Monitoring type	Monitoring point NGR	Monitoring point reference
A1 Secondary treated sewage effluent via Final Effluent Discharge Point	UWWTR inlet sampling	SN79045 04029	UWWTR Inlet Sample Point
	Final effluent sampling	SN 78900 03900	Final Effluent Sample Point
	MCERTS continuous flow monitoring	SN 79021 04017	MCERTS Flow Monitoring Point
	UWWTR sampling	SN 78900 03900	UWWTR Sample Point
A2 Settled storm sewage via Settled Storm Discharge Point	Settled storm effluent sampling	SN 79027 04018	Settled Storm Sample Point
	Event duration monitoring	SN 79035 03998	Settled Storm to Environment EDM Monitoring Point
	Flow passed forward monitoring	SN 79021 04017	MCERTS FPF Monitoring Point
	Overflow operation (into storm storage) monitoring	SN 79035 03998	EDM to Storm Tank Monitoring Point

Schedule 3A - Look up table

Look up table	
Number of samples taken in any period of 12 months	Maximum number of samples permitted to exceed limit for given parameter
4–7	1
8–16	2
17–28	3
29–40	4
41–53	5
54–67	6
68–81	7
82–95	8
96–110	9
111–125	10
126–140	11
141–155	12
156–171	13
172–187	14
188–203	15
204–219	16
220–235	17
236–251	18
252–268	19
269–284	20
285–300	21
301–317	22
318–334	23
335–350	24
351–365	25

Schedule 3B - OSM tier 3 sampling frequency

Parameter	'Normal frequency' of samples per year	Reduced Sampling frequency after 12 consecutive months of numeric permit compliance, samples per year or pro rata over the remainder of a year	On numeric limit failure return to normal frequency as soon as reasonably practicable, samples per 12 months	Out of hours samples
Sanitary	24	12	24	For 24 samples 2 out of hours samples per annum
Non sanitary	12	12	12	For 12 samples 1 out of hours sample per annum

Schedule 3C – Urban Waste Water Treatment Regulations sampling frequency

Population equivalent	Samples per year	Reduced sampling frequency after a year without an UWWTR exceedance or failure, samples per year	Following an UWWTR exceedance or failure return to the higher frequency in the year that follows, samples per year
2,000 to 9,999	12	4	12
10,000 to 49,999	12	N/A	N/A
50,000 or over	24	N/A	N/A

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data				
Activity Reference	Parameter	Monitoring point reference	Reporting period	Period begins
A1 Discharge of secondary treated sewage effluent via Final Effluent Discharge Point	Dry Weather Flow (daily flows total)	MCERTS Flow Monitoring Point	Annually Report to be submitted within 2 months of the end of the calendar year	1 st January
	15-minute flow	MCERTS Flow Monitoring Point	Reports to be provided to Natural Resources Wales upon request Report to be submitted within 28 days unless otherwise specified in writing by Natural Resources Wales	Upon request by Natural Resources Wales
	UWWTR - ATU-BOD as O ₂ , COD as O ₂ ,	UWWTR Inlet Sample Point and UWWTR Sample Point	Monthly Report to be submitted within 28 days	1 st of month
	Operator Self-Monitoring - ATU-BOD as O ₂ , ammoniacal nitrogen (expressed as N), suspended solids (measured after drying at 105°C),	Final Effluent Sample Point	Quarterly Report to be submitted within 28 days	1 st of month
	Operator Self-Monitoring summary report	Final Effluent Sample Point	Annually Report to be submitted within 2 months of the end of the calendar year	1 st January
A2 Settled storm sewage via Settled Storm Discharge Point	Settled storm event recorder status operational	Settled Storm to Environment EDM Monitoring Point	Annually Report to be submitted within 2 months	1 st January
	Settled storm overflow performance, including block-counted significant spills	Settled Storm Sample Point and Settled Storm to Environment EDM Monitoring Point	Annually Report to be submitted within 2 months	1 st January

Table S4.1 Reporting of monitoring data				
Activity Reference	Parameter	Monitoring point reference	Reporting period	Period begins
	Duration of total spills	Settled Storm to Environment EDM Monitoring Point	Annually Report to be submitted within 2 months	1 st January
	Settled storm sewage discharge start and end times	Settled Storm to Environment EDM Monitoring Point	Reports to be provided to Natural Resources Wales upon request	As specified by Natural Resources Wales
	Flow passed forward monitoring	MCERTS FPF Monitoring Point	Reports to be provided to the Natural Resources Wales upon request Report to be submitted within 28 days unless otherwise specified in writing by the Natural Resources Wales	Upon request by the Natural Resources Wales
	Overflow operation (into storm storage) yes/no or start and end times	EDM to Storm Tank Monitoring Point	Reports to be provided to the Natural Resources Wales upon request Report to be submitted within 28 days unless otherwise specified in writing by the Natural Resources Wales	Upon request by the Natural Resources Wales
	Overflow operation (into storm storage) monitoring status (operational / not operational)	EDM to Storm Tank Monitoring Point	Reports to be provided to the Natural Resources Wales upon request Report to be submitted within 28 days unless otherwise specified in writing by Natural Resources Wales	Upon request by Natural Resources Wales
	Flow passed forward and overflow operation monitoring annual report	MCERTS FPF Monitoring Point and EDM to Storm Tank Monitoring Point	Annually Report to be submitted within 2 months	1 st January

Table S4.2 Reporting forms	
Parameter	Reporting format
Dry Weather Flow (daily flows total)	Electronic format specified by Natural Resources Wales
15-minute flow	Electronic format specified by Natural Resources Wales

Table S4.2 Reporting forms	
Parameter	Reporting format
UWWTR – ATU-BOD as O ₂ , COD as O ₂ ,	Electronic format specified by Natural Resources Wales
OSM - ATU-BOD as O ₂ , ammoniacal nitrogen (expressed as N), suspended solids (measured after drying at 105°C),	Quarterly - Electronic format specified by Natural Resources Wales
Operator Self-Monitoring summary report	Annually - Summary report of compliance with the monitoring programme specified in Table 3.1 and schedule 3B in a format specified by Natural Resources Wales
Settled storm overflow performance including number and duration of block-counted spills	Annual summary report or other form as agreed in writing by Natural Resources Wales
Settled storm sewage discharge start and end times	Form as agreed in writing by Natural Resources Wales
Settled storm overflow event recorder status (operational / not operational)	Annual summary report or other form as agreed in writing by Natural Resources Wales Percentage of time in the recording period that event duration monitoring equipment is operational
Investigation into the operation of the settled storm overflow	Electronic format as agreed in writing by Natural Resources Wales.
Flow passed forward monitoring	Electronic format specified by Natural Resources Wales
Overflow operation (into storm storage) yes/no or start and end times	Electronic format specified by Natural Resources Wales
Overflow operation (into storm storage) monitoring status (operational / not operational)	Electronic format specified by Natural Resources Wales
Flow passed forward and overflow operation monitoring annual report	Annual report format as specified by Natural Resources Wales

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	BA2001101
Name of operator	Dŵr Cymru Cyfyngedig
Location of Facility	Crynant Sewage Treatment Works, Track Off Neath Road (A4109) , Crynant, Neath, SA10 8SG
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection unless otherwise agreed in writing by the Natural Resources Wales.	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released/type or nature of sewage released	
Best estimate of the quantity or rate of release of substances and/or duration of discharge	
Best estimate of the environmental impact of the discharge	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit specified in schedule 3 table S3.1 (including individual exceedances of limits which are covered by condition 3.1.2)	
The information specified below is to be notified to Natural Resources Wales as soon as reasonably practicable following detection.	
Monitoring point reference/ source	

(b) Notification requirements for the breach of a limit specified in schedule 3 table S3.1 (including individual exceedances of limits which are covered by condition 3.1.2)	
The information specified below is to be notified to Natural Resources Wales as soon as reasonably practicable following detection.	
Self-monitoring regime (where relevant)	e.g. OSM/UWWTR/EDM
Type of failure	e.g. LUT failure/LUT exceedance/upper tier/other
Date of sample/event	
Parameter	
Result and units	
Limit and units	

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B – to be submitted as soon as reasonably practicable unless otherwise agreed in writing by Natural Resources Wales

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident/breach/exceedance	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

“abnormal operating conditions” include but are not limited to, the circumstances described in Regulation 40(1) of, or paragraph 6(5) of Schedule 21 to, the Environmental Permitting Regulations 2016 (illegal discharge to sewer), unusual weather, or during a defined period where the permit authorising the permitted activity has been varied for reasons such as capital works construction.

“accident” means an accident that may result in pollution.

“annually” means once every year.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

For the activities (A1 to A2), referenced in schedule 1, table S1.1, “appropriate measures” for the purposes of the emission of substances not controlled by emission limits condition (condition 3.2.1) do not require the operator to undertake treatment to a level beyond that specified in schedule 1 table S1.1, or to carry out routine monitoring for substances not controlled by emission limits.

“ATU-BOD as O₂” means the biochemical oxygen demand (measured after 5 days at 20°C with nitrification suppressed by the addition of allylthiourea).

“block-counted spill” one or more overflow events within a period of 12 hours or less will be considered to be one spill, one or more overflow events extending over a period of greater than 12 hours up to 36 hours will be considered to be 2 spills. Each subsequent 24-hour duration counts as 1 additional spill and the whole of the 24-hour block is included.

“COD as O₂” means the chemical oxygen demand (measured using the standard dichromate procedure).

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the permitted activities, which are not controlled by an emission limit.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“event recorder” a recorder which records the start time and end time of individual overflow events.

“flow passed forward” for the purposes of conditions 2.3.2 and 3.1.6 means, the rate of flow (litres per second) of the waste water arriving at the overflow from its upstream collection system and passed forward to the continuation flow. It does not include any flows that have already been passed forward by the overflow and are reintroduced to the incoming flow upstream of the overflow from any point downstream of it.

“Formula A” is defined as $(PG+I+E) + 1360P + 2E$ litres/day. Where P = population served, G = water consumption per head per day (litres/head/day) I = infiltration (litres/day) E = trade effluent flow to sewer (litres/day)

“good flow data for at least 90% of each day” means at least 87 fifteen minute or 648 two-minute flow readings are flagged as good in a day.

“good overflow operation data for at least 90% of each day” means at least 648 two-minute overflow operation readings are flagged as good or the overflow operation duration monitor is operational for at least 1,296 minutes in a day.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“minimum screen capacity flow” means the minimum flow passed through the screens to the outfall when the screen bypass operates.

“monitoring frequency” as used in Table S3.1 in the context of event duration monitoring is the temporal interval at which a change in state between no discharge and discharge is to be detected.

“Natural Resources Wales” means the Natural Resources Body for Wales established by article 3 of the Natural Resources Body for Wales (Establishment) Order 2012. The Natural Resources Body for Wales (Functions) Order 2013 transferred the relevant functions of the Countryside Council for Wales, and functions of the Environment Agency and the Forestry Commission in Wales to the Natural Resources Body for Wales.

“Non-routine planned maintenance” means maintenance, inspection, refurbishment, or replacement of plant and equipment carried out in accordance with a documented maintenance plan, which is foreseeable and can be planned at least 5 working days in advance.

“Non-routine un-planned maintenance” means extra-ordinary maintenance to carry out inspection, refurbishment, or replacement of plant and equipment that is unforeseeable and cannot be planned at least 5 working days in advance.

“overflow” for the purposes of schedule 7, overflow means the weir or orifice or other control which directs excess flow away from the continuation sewer when the flow exceeds the overflow setting due to rainfall and/or snowmelt.

“overflow setting” means the minimum flow passed forward to the continuation sewer when the overflow operates.

“quarter” means a calendar year quarter commencing on 1st January, 1st April, 1st July or 1st October.

“Regular planned maintenance” means scheduled maintenance, inspection, refurbishment, or replacement of plant and equipment carried out periodically and in accordance with a documented maintenance plan, it does not have to take place on specified dates.

“significant pollution” means a high level impact incident as indicated by NRW incident classification system.

“significant spill” any spill that has not been demonstrated to have been, or measured as being, less than 50 m³ in volume.

“Total uncertainty” means the combined (total) uncertainty of the flow rate measurement due to the flow monitoring installation, as determined by an MCERTS inspector, and uncertainties induced between the overflow and the flow monitor as determined by the operator. Allowances for time delays in flow response through the WwTW are taken into account by condition 3.1.6

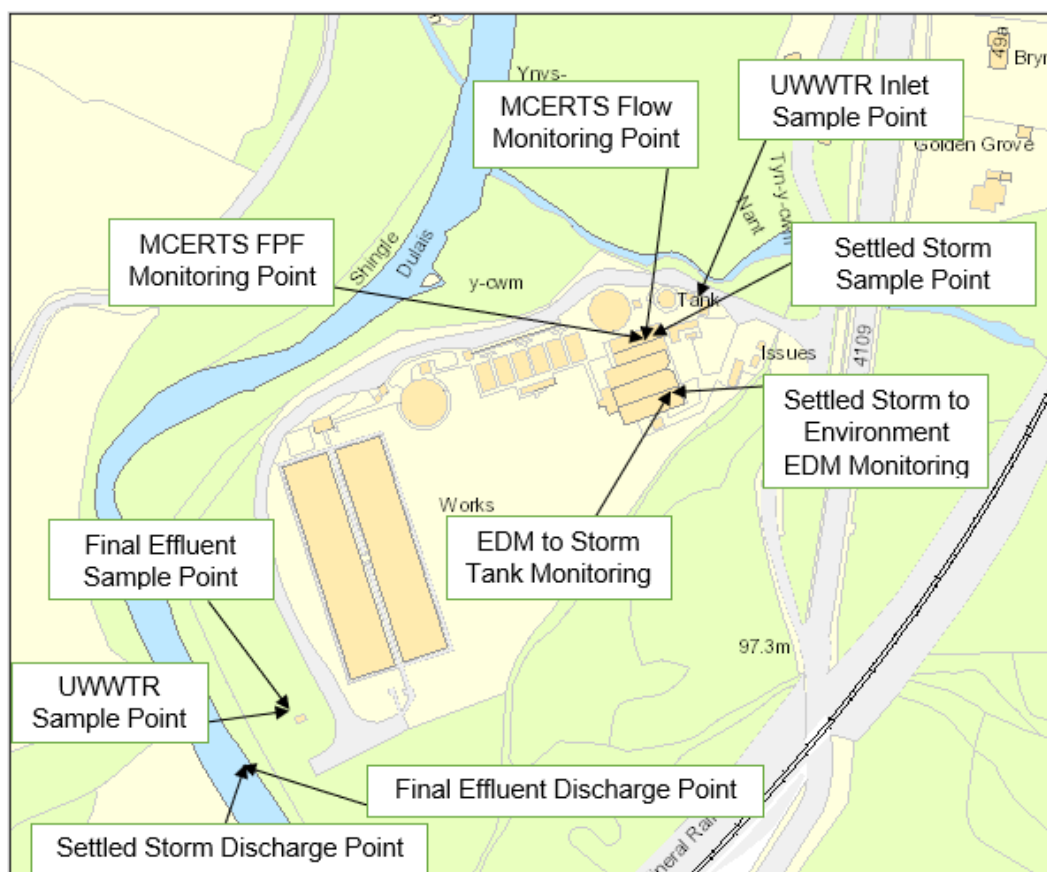
“unusual weather conditions” includes, but is not limited to:

- low ambient temperatures, or the freezing of mechanical equipment in the works;
- significant snow deposits;
- tidal or fluvial flooding;
- weather conditions causing unforeseen loss of power supply to the sewage treatment that could not be ameliorated by the reasonable provision and operation of standby generation facilities.

“Urban Waste Water Treatment (England and Wales) Regulations 1994 (UWWTR)” means Urban Waste Water Treatment (England and Wales) Regulations 1994 SI 2841 and the words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“year” means calendar year ending 31st December.

Schedule 7 – Site plan



© Crown Copyright and database right 2023. Ordnance Survey licence number 100019741.

END OF PERMIT