Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

United Utilities Water Limited

Wrenbury Wastewater Treatment Works (WRENB)
Woodcotthill Lane
Nantwich
Cheshire
CW5 8EH

Variation number

016810119/V002

Permit number

016810119

Wrenbury Wastewater Treatment Works (WRENB) Permit number 016810119

Introductory note

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

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. Only the variations specified in schedule 1 are subject to a right of appeal.

This permit variation and consolidation is to reflect asset improvements that have been agreed between the Environment Agency and United Utilities Water Limited as part of the National Environment Programme. This permit requires the operator to meet the total phosphorus limit of 1 milligram per litre (mg/l) and the total iron limits of 4mg/l (95 percentile) and 8mg/l (maximum) in the final effluent (activity A1). This should be completed by the agreed delivery date of 31 December 2021.

The compliance statistic for total phosphorus as P has been updated to rolling 12 month mean and condition 3.1.7 and schedule 3D applies. The new dry weather flow conditions have been included.

We consider that in reaching our decision to vary the permit we have taken into account all relevant considerations and legal requirements. We are satisfied that the permit will ensure that a high level of protection is provided for the environment and human health and that the activities will not give rise to any significant pollution of the environment or harm to human health.

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 the permit		
Description	**Date**	**Comments**
Variation determined 016810119	18/06/2018	Permit varied to include the requirements for the operator to install EDM on the storm overflow.
Environment Agency initiated variation 016810119/V002	01/04/2020	Variation of permit initiated under PR19 review programme to incorporate improvements to be delivered under AMP7.
Variation determined 016810119	01/10/2021	Varied permit issued.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies and consolidates

Permit number

016810119

Issued to

United Utilities Water Limited ("the operator")

whose registered office is

Haweswater House
Lingley Mere Business Park
Lingley Green Avenue
Great Sankey
Warrington
WA5 3LP

company registration number 02366678

to operate water discharge activities at

Wrenbury Wastewater Treatment Works (WRENB)
Woodcotthill Lane
Nantwich
Cheshire
CW5 8EH

to the extent set out in the schedules.

The notice shall take effect from 01/10/2021

Name	Date
Rob McHale	01/10/2021

Authorised on behalf of the Environment Agency

Schedule 1

Only the following conditions have been varied by the consolidated permit 016810119/V002 as a result of an Environment Agency initiated variation.

Conditions 3.1.5, 3.1.6, 3.1.7 and 3.3.10

Tables S1.1b, S3.1b, S4.1b and S4.2b

Schedule 3D

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

016810119

This is the consolidated permit referred to in the variation and consolidation notice for variation 016810119/V002 authorising,

United Utilities Water Limited ("the operator"),

whose registered office is

Haweswater House
Lingley Mere Business Park
Lingley Green Avenue
Great Sankey
Warrington
WA5 3LP

company registration number 02366678

to operate water discharge activities at

Wrenbury Wastewater Treatment Works (WRENB)
Woodcotthill Lane
Nantwich
Cheshire
CW5 8EH

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

Name	Date
Rob McHale	01/10/2021

Authorised on behalf of the Environment Agency

Conditions

1 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.

2 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 point marked on the site plan 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) 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.

(c) Where a mechanically cleaned screen is installed, a telemetry alarm system shall be installed and maintained, as far as reasonably practicable, so as to give the operator immediate notification of a failure of the screen cleaning mechanism, unless otherwise agreed in writing by the Environment Agency. 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.

2.3.3 For the activity A2 referenced in schedule 1, table S1.1 where the discharge results in unsatisfactory solid matter being visible in the receiving waters or on the banks or shoreline, in the vicinity of the outfall, the operator shall take all reasonable steps to collect and remove such matter as soon as reasonably practicable.

3 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 the Environment Agency 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 the Environment Agency 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) Up to and including 31 December 2025:

(i) If an exceedance of the Dry Weather Flow limit is recorded in a calendar year then the operator shall, as soon as is reasonably practicable, investigate the reasons for the exceedance.

(ii) The operator shall report the reasons for the exceedance to the Environment Agency 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 the 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.

3.1.6 Effective from 01 January 2022

The limits in schedule 3 table S3.1 to which this condition applies are assessed using any series of samples of the discharge taken at regular but randomised intervals in any period of twelve consecutive months.

3.1.7 Effective from 01 January 2022

The emission limits in schedule 3 table S3.1 to which this condition applies shall have been complied with if the lower bound 90% confidence interval calculated in accordance with schedule 3D is less than or equal to that emission limit.

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 the Environment Agency, 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 specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.3.4 Accessible monitoring points shall be provided and maintained to enable the emissions monitoring programme and/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 plan 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) spot 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 the Environment Agency, the operator shall submit the monitoring programme for the following calendar year to the Environment Agency 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 the Environment Agency, 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 the Environment Agency of the missed event and the reschedule date as soon as reasonably practicable.

3.3.9 For the activity A2 referenced in schedule 1, table S1.1 an event duration monitoring system shall be installed and maintained, as far as reasonably practicable so as to give the operator data available of discharge occurrence (start and stop) at the frequency defined in table S3.1.

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;

Total Daily Volume (m3) = {Sum of 'good' readings (l/s) / number of 'good' readings} x {86,400 (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 Environment Agency.

(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.

4 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 the Environment Agency, for at least 6 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 the Environment Agency using the contact details supplied in writing by the Environment Agency.

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 the Environment Agency, 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.

4.3 Notifications

4.3.1 The Environment Agency 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 the Environment Agency 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 the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling specified in schedule 3B and 3C, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency 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) the Environment Agency 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 the Environment Agency in writing of any change, or proposed change, to the population equivalent such as would make a material change to the application of the Urban Waste Water Treatment (England and Wales) Regulations 1994 and shall, on request, inform the Environment Agency 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 with nutrient removal via Outlet	N/A
A2	Discharge of storm sewage via Outlet	N/A

Schedule 2 – Waste types, raw materials and fuels

Schedule 2 not in use.

Schedule 3 – Emissions and monitoring

Table S3.1a Point Source emissions to water (other than sewer) – emission limits and monitoring requirements **Effective up to and including 31 December 2021**						
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 Outlet	Dry weather flow	734 m^3/day	Total daily volume	N/A	Continuous	Condition 3.1.5 applies
	15-minute instantaneous or averaged flow	No limit set. Record as l/s	15 minute	N/A	Continuous	N/A
	ATU-BOD as O_2	30 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	64 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)
	Suspended solids (measured after drying at 105^{o}C)	45 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	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)
	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				

Table S3.1a Point Source emissions to water (other than sewer) – emission limits and monitoring requirements **Effective up to and including 31 December 2021**						
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)	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 Storm sewage via Outlet	Storm sewage discharge event duration monitoring (discharge / no discharge)	N/A	N/A	Condition 3.3.3 does not apply	15 minute	N/A
	Storm sewage discharge start and end times	N/A	N/A	Condition 3.3.3 does not apply	Whenever a discharge occurs	N/A
	Storm sewage discharge event duration monitoring status (operational / not operational)	N/A	N/A	Condition 3.3.3 does not apply	15 minute	N/A

Table S3.1b Point Source emissions to water (other than sewer) – emission limits and monitoring requirements **Effective from 01 January 2022**						
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 with nutrient removal via Outlet	Dry weather flow	734 m^3/day	Total daily volume	N/A	Continuous	Condition 3.1.5 applies
	15-minute instantaneous or averaged flow	No limit set. Record as l/s	15 minute	N/A	Continuous	N/A
	ATU-BOD as O_2	30 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	64 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)
	Suspended solids (measured after drying at 105°C)	45 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	Total phosphorus as P	1 mg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Rolling 12 month mean (Condition 3.1.3 and 3.1.6, 3.1.7 and schedule 3D applies)
	Total iron as Fe	4,000 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Look up table (Conditions 3.1.2 and 3.1.3 apply)
	Total iron as Fe	8,000 µg/l	Instantaneous (spot sample)	N/A	As specified in schedule 3B	Maximum (Condition 3.1.3 applies)

Table S3.1b Point Source emissions to water (other than sewer) – emission limits and monitoring requirements **Effective from 01 January 2022**						
Effluent(s) and discharge point(s)	**Parameter**	**Limit (including unit)**	**Reference Period**	**Limit of effective range**	**Monitoring frequency**	**Compliance Statistic**
	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)
	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 Storm sewage via Outlet	Storm sewage discharge event duration monitoring (discharge / no discharge)	N/A	N/A	Condition 3.3.3 does not apply	15 minute	N/A
	Storm sewage discharge start and end times	N/A	N/A	Condition 3.3.3 does not apply	Whenever a discharge occurs	N/A

Table S3.1b Point Source emissions to water (other than sewer) – emission limits and monitoring requirements Effective from 01 January 2022						
Effluent(s) and discharge point(s)	**Parameter**	**Limit (including unit)**	**Reference Period**	**Limit of effective range**	**Monitoring frequency**	**Compliance Statistic**
	Storm sewage discharge event duration monitoring status (operational / not operational)	N/A	N/A	Condition 3.3.3 does not apply	15 minute	N/A

Table S3.2 Discharge points			
Effluent Name	**Discharge Point**	**Discharge point NGR**	**Receiving water/Environment**
A1 Secondary treated sewage effluent with nutrient removal	Outlet	SJ 60777 47560	River Weaver
A2 Storm sewage	Outlet	SJ 60777 47560	River Weaver

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 storage capacity m^3**
A2 Storm sewage via Outlet	Storm sewage	66.3	No greater than 6 mm in more than 1 dimension	6 mm x 6 mm	N/A

Table S3.4 Monitoring points			
Effluent(s) and discharge point(s)	**Monitoring type**	**Monitoring point NGR**	**Monitoring point reference**
A1 Secondary treated sewage effluent with nutrient removal via Outlet	UWWTR influent sampling	SJ 60734 47416	UWWT Influent Sample Point
	UWWTR effluent sampling	SJ 60762 47530	UWWT Effluent Sample Point
	Effluent sampling	SJ 60762 47530	Final Effluent Sample Point
	MCerts flow monitoring	SJ 60760 47415	MCERTS Flow Monitoring Point
A2 Storm sewage via Outlet	Effluent sampling	SJ 60734 47416	Storm Overflow Sample Point
	Event duration monitoring	SJ 60745 47416	EDM 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[1]	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

[1]For UV efficacy monitoring use sanitary frequency and increase following failure of UV requirements only.

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 3D – Rolling 12 month mean assessment methodology and t-values

Rolling 12 month mean compliance assessment method for site specific phosphorus limits (not UWWTR)

Use concentrations from the pre-scheduled samples taken in any period of 12 consecutive months unless a fixed 12-month period is specified by the permit.

1. Take the log10 value of all P concentrations in the data set. For a zero value, take the log10 value of the minimum detection limit of the analytical method used. Treat less thans or greater thans as face value.
2. Calculate the mean of the log10 values.
3. Calculate the standard deviation of the log10 values.
4. Calculate the lower confidence interval using the formula lower confidence interval = mean – (t x standard error of mean).

   Where:

   - t is derived from the values of t table for n-1 degrees of freedom, where n is the number of samples
   - the standard error of the mean is the standard deviation of the dataset ÷ √n.
5. Antilog the lower confidence interval.

If the lower bound confidence interval exceeds the permit limit, then we are 95% confident that the limit has been exceeded and a failure is recorded.

Values of t	
Degrees of freedom	**t for 90% confidence interval**
2	2.920
3	2.353
4	2.132
5	2.015
6	1.943
7	1.895
8	1.860
9	1.833
10	1.813
11	1.796
12	1.782
13	1.771
14	1.761
15	1.753
16	1.746
17	1.740
18	1.734
19	1.729
20	1.725
25	1.708
30	1.697
35	1.690
40	1.684
50	1.676
60	1.671
70	1.667
80	1.664
90	1.662
100	1.660
1,000	1.646

Schedule 4 – Reporting

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

Table S4.1a Reporting of monitoring data **Effective up to and including 31 December 2021**			
Parameter	**Monitoring point reference**	**Reporting period**	**Period begins**
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 January
15-minute flow	MCERTS Flow Monitoring Point	Reports to be provided to the Environment Agency upon request Report to be submitted within 28 days unless otherwise specified in writing by the Environment Agency	Upon request by the Environment Agency
UWWTR - ATU-BOD as O_2, COD as O_2	UWWT Influent Sample Point UWWT Effluent Sample Point	Monthly Report to be submitted within 28 days	1st of month
Operator Self Monitoring - ATU-BOD as O_2, ammoniacal nitrogen (expressed as N), suspended solids (measured after drying at 105^{o}C)	Final Effluent Sample Point	Quarterly Report to be submitted within 28 days	1st 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 January
Storm sewage discharge start and end times	EDM Monitoring Point	Reports to be provided to the Environment Agency upon request Report to be submitted within 28 days unless otherwise specified in writing by the Environment Agency	Upon request by the Environment Agency
Storm sewage discharge start and end times	EDM Monitoring Point	Annually Report to be submitted within 2 months	1 January
Storm sewage discharge event duration monitoring status (operational / not operational)	EDM Monitoring Point	Annually Report to be submitted within 2 months	1 January

Table S4.1b Reporting of monitoring data **Effective from 01 January 2022**			
Parameter	**Monitoring point reference**	**Reporting period**	**Period begins**
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 January
15-minute flow	MCERTS Flow Monitoring Point	Reports to be provided to the Environment Agency upon request Report to be submitted within 28 days unless otherwise specified in writing by the Environment Agency	Upon request by the Environment Agency
UWWTR - ATU-BOD as O_2, COD as O_2	UWWT Influent Sample Point UWWT Effluent Sample Point	Monthly Report to be submitted within 28 days	1st of month
Operator Self Monitoring - ATU-BOD as O_2, ammoniacal nitrogen (expressed as N), suspended solids (measured after drying at 105^{o}C), total phosphorus as P, total iron as Fe	Final Effluent Sample Point	Quarterly Report to be submitted within 28 days	1st 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 January
Storm sewage discharge start and end times	EDM Monitoring Point	Reports to be provided to the Environment Agency upon request Report to be submitted within 28 days unless otherwise specified in writing by the Environment Agency	Upon request by the Environment Agency
Storm sewage discharge start and end times	EDM Monitoring Point	Annually Report to be submitted within 2 mont	1 January
Storm sewage discharge event duration monitoring status (operational / not operational)	EDM Monitoring Point	Annually Report to be submitted within 2 months	1 January

Table S4.2a Reporting forms **Effective up to and including 31 December 2021**	
Parameter	**Reporting format**
Dry Weather Flow (daily flows total)	WISKI electronic format specified by the Environment Agency
15-minute flow	WISKI electronic format specified by the Environment Agency
UWWTR – ATU-BOD as O_2, COD as O_2	Electronic format specified by the Environment Agency
OSM - ATU-BOD as O_2, ammoniacal nitrogen (expressed as N), suspended solids (measured after drying at 105°C)	Quarterly - Electronic format specified by the Environment Agency
Operator Self Monitoring summary report	Annually - Summary report of compliance with the monitoring programme specified in table S3.1 and schedule 3B in a format specified by the Environment Agency
Storm sewage discharge start and end times	Form as agreed in writing by the Environment Agency
Storm sewage discharge start and end times	Annual summary report or other form as agreed in writing by the Environment Agency Number of and total duration of counted spills for all spills.
Storm sewage discharge event duration monitoring status (operational / not operational)	Annual summary report or other form as agreed in writing by the Environment Agency Percentage of time in the reporting period that the event duration monitoring equipment was operational.

Table S4.2b Reporting forms **Effective from 01 January 2022**	
Parameter	**Reporting format**
Dry Weather Flow (daily flows total)	WISKI electronic format specified by the Environment Agency
15-minute flow	WISKI electronic format specified by the Environment Agency
UWWTR – ATU-BOD as O_2, COD as O_2	Electronic format specified by the Environment Agency
OSM - ATU-BOD as O_2, ammoniacal nitrogen (expressed as N), suspended solids (measured after drying at 105°C), total phosphorus as P, total iron as Fe	Quarterly - Electronic format specified by the Environment Agency
Operator Self Monitoring summary report	Annually - Summary report of compliance with the monitoring programme specified in table S3.1 and schedule 3B in a format specified by the Environment Agency
Storm sewage discharge start and end times	Form as agreed in writing by the Environment Agency
Storm sewage discharge start and end times	Annual summary report or other form as agreed in writing by the Environment Agency Number of and total duration of counted spills for all spills.
Storm sewage discharge event duration monitoring status (operational / not operational)	Annual summary report or other form as agreed in writing by the Environment Agency Percentage of time in the reporting period that the event duration monitoring equipment was operational.

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	
Name of operator	
Location of Facility	
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 7 days of detection unless otherwise agreed in writing by the Environment Agency	
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 the Environment Agency as soon as reasonably practicable following detection.	
Monitoring point reference/ source	
Self monitoring regime (where relevant)	e.g. OSM/UWWTR
Type of failure	e.g. LUT failure/LUT exceedance/upper tier/other
Date of sample/event	
Parameter	
Result and units	
Limit and units	

Part B – to be submitted as soon as reasonably practicable unless otherwise agreed in writing by the Environment Agency

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 activity A1 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 O_2” means the biochemical oxygen demand (measured after 5 days at 20^{o}C with nitrification suppressed by the addition of allylthiourea).

“COD as O_2” 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.

“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 of state between no discharge and discharge is to be detected.

“overflow” for the purposes of schedule 7, means any weir or orifice or other means via which flow in excess of its overflow setting is diverted from the continuation sewer when it is caused by rainfall and or snowmelt.

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

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“significant pollution” means a category 1 or category 2 incident indicated by the Common Incident Classification Scheme (CICS).

“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.

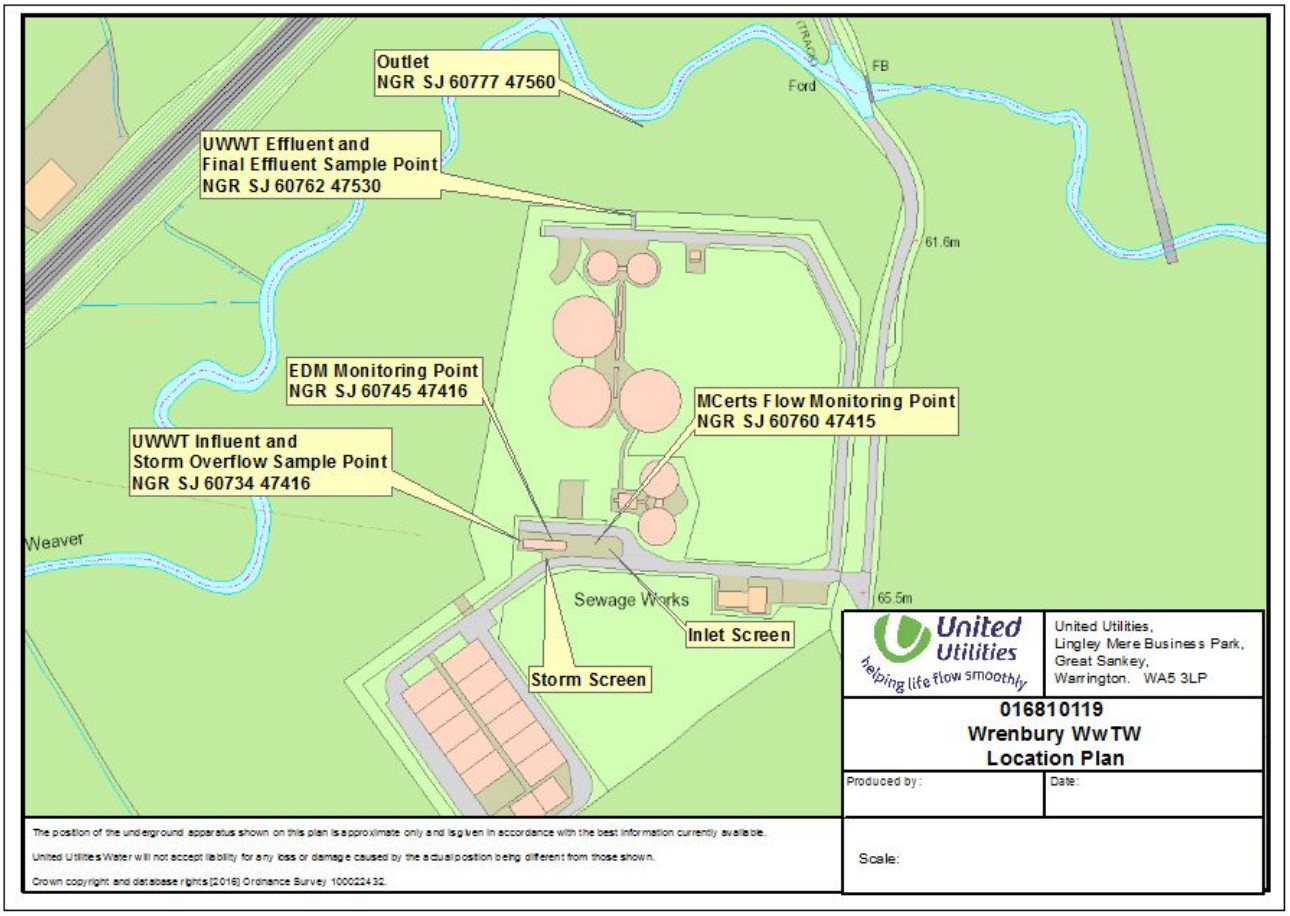
“unusual weather conditions” includes, but is not limited to:

- 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 2841and 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 31 December.

Schedule 7 – Site plan



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END OF PERMIT