



Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

United Utilities Water Limited

IFAS Power Island

Ellesmere Port Wastewater Treatment Works

Little Stanney

Chester

CH2 4HZ

Permit number

EPR/BP3000LW

Permit number EPR/BP3000LW

Introductory note

This introductory note does not form a part of the permit

This permit will allow the operator to operate:

- One or more new medium combustion plant (MCP) between 1 and <50MWth but aggregated to <50MWth, which were put in operation on or after 20/12/2018 at a specified location; and/or
- One Tranche B Specified Generator (SG) aggregated to <50MWth at a specified location.

The details of the units and associated limits and monitoring requirements are specified in Tables S1.1 and S3.1.

The site, known as IFAS Power Island, is located within Ellesmere Port Wastewater Treatment Works. It is located approximately 1 kilometre south east of the village of Little Stanney, on the Wirral Peninsula in Cheshire. The installation is approximately centred around National Grid Reference (NGR) SJ 42334 74056.

The site is operated by United Utilities Water Limited. It consists of 6 gas oil (diesel) generators with selective catalytic reduction (SCR) abatement. The generators each have a thermal input of 1.1 MWth.

The purpose of the generators at The Power Island site is to provide power to the newly-constructed waste water treatment works, which requires more power than is currently available from the grid supply to the site. The Aggreko Stage 5 diesel engines will provide the site with power until a permanent grid supply is available.

Generators DG5 and DG6 will be used as standby generators and operated up to 168 hours and 50 hours per year, respectively.

The plant discharges directly to atmosphere via six stacks: one each for the generators, each with 12 metre-high vertical flues.

All plant mentioned above is classed as new MCPs permitted under Schedule 25A of the Environmental Permitting Regulations, as the date of first operation is after 20/12/2018. The generators also classify as a Tranche B SG, permitted under Schedule 25B, with a thermal input of 6.6 MWth. This is because the date of first operation is after 01/12/2016. The Operator must be compliant upon permit issue.

The site is not located within an Air Quality Management Area (AQMA). However, there are several AQMAs designated for Nitrogen Dioxide (NO₂) within the vicinity of the site, namely: Whitby Road / Station Road AQMA; Frodsham AQMA and Chester City Centre AQMA (Number 5).

The nearest non-roadside human health receptor is located approximately 330 metres away from the MCP and Specified Generator stacks.

There are two European Habitat sites within the relevant screening distance of 5 kilometres of the site: Mersey Estuary Ramsar and Special Protection Area (SPA). There are no Sites of Special Scientific Interest (SSSI) within the relevant screening distance of 2km.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	Date	Comments
Application EPR/BP3000LW/A001	Duly made 12/11/2021	Bespoke application for MCPs and Specified Generator.
Additional information received	30/05/2022	Amended application forms: Parts A and F.
Permit determined EPR/BP3000LW	28/06/2022	Permit issued to United Utilities Water Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/BP3000LW

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

United Utilities Water Limited (“the operator”),

whose registered office is

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

company registration number 02366678

to operate one or more Medium Combustion Plant and/or Specified Generators at

**IFAS Power Island
Ellesmere Port Wastewater Treatment Works
Little Stanney
Chester
CH2 4HZ**

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

Name	Date
Sandra Cavill	28/06/2022

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 arising from operations, maintenance, accidents, incidents, non-conformances, closure 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 it kept at or near the place where those duties are carried out.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1, table S1.1 (the “activities”).

2.2 The site

- 2.2.1 No MCP shall be operated beyond the site of the grid reference specified for it in schedule 1, table S1.1 of the permit.

2.3 Operating techniques

- 2.3.1 The activities shall be operated using the techniques and in the manner described in schedule 1, tables S1.2A and S1.2B.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to air except from the sources and emission points listed in schedule 3, table S3.1.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

3.2 Monitoring

- 3.2.1 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, or at a greater frequency if notified to the operator in writing by the Environment Agency:
- (a) point source emissions specified in table S3.1.
- 3.2.2 Monitoring shall not take place during periods of start up or shut down.

- 3.2.3 For the following activities referenced in schedule 1, table S1.1 (DG1 to DG6) the first monitoring measurements shall be carried out within four months of the issue date of the permit or the date when the MCP is first put into operation, whichever is later.
- 3.2.4 For the following activities referenced in schedule 1, table S1.1 (DG1 to DG6) where secondary abatement is required to ensure compliance with the NO_x ELV monitoring shall start 10 minutes from when the generator commences operation, or within 20 minutes when the generator was a Tranche A and is now a Tranche B generator.
- 3.2.5 The operator shall maintain records of all monitoring including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, test and surveys and any assessment or evaluation made on the basis of such data.
- 3.2.6 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme specified in condition 3.2.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

- 4.1.1 All records required to be made by 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, plans and management system required to be maintained by this permit.
- 4.1.3 The operator shall maintain a record of the type and quantity of fuel used and the total annual hours of operation for each MCP and/or generator.
- 4.1.4 The operator shall maintain a record of any events of non-compliance and the measures taken to ensure compliance is restored in the shortest possible time

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 28 days of the end of the reporting period 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 emission 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 as required by the forms specified in those tables.

4.3 Notifications

4.3.1 In the event:

- (a) of a breach of any of the permit conditions the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (b) of a breach of any of the permit conditions which causes a significant degradation of local air quality, the operator must immediately suspend the operation of the activities or the relevant part of them until compliance with the conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed 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, 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:

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

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

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 "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities				
National Grid Reference and or activity reference/ emission point	Activity listed in the EP Regulations	Description of MCP and/or specified generator	Fuel	Operating hours limit per year
DG1 NGR SJ 42330 74047	Schedule 25A – MCPs as detailed in Schedule 7 and Schedule 25B – Specified generator	6 x 1.1MWth engines with SCR	Gas oil (diesel)	Not restricted (all generators)
DG2 NGR SJ 42334 74051				
DG3 NGR SJ 42336 74053				
DG4 NGR SJ 42341 74058				
DG5 NGR SJ 42345 74061				
DG6 NGR SJ 42347 74063				

Table S1.2A Operating techniques for Medium Combustion Plant as detailed in Schedule 7
<p>(a) Each MCP must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.</p> <p>(b) The operator must keep periods of start-up and shut-down of each MCP as short as possible.</p> <p>(c) There must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.</p>

Table S1.2B Operating techniques for Specified Generators

- (a) Each generator must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.
- (b) The operator must keep periods of start-up and shut down of the generators as short as possible
- (c) There must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.
- (d) Where secondary abatement is required to ensure compliance with the NO_x ELV it must be met within 10 minutes from when the generator commences operation or within 20 minutes when the generator was a Tranche A and is now a Tranche B generator.
- (e) Abatement Plant must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.
- (f) The stack must be vertical and unimpeded by cowls or caps.

Schedule 2 – Waste types, raw materials and fuels

This schedule is not used

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location as referenced in table S1.1	Pollutant	Combustion Technology	Emission limit mg/Nm ³	Reference period	Monitoring frequency	Monitoring standard or method ^{Note 1}
Generators DG1 to DG6	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Diesel engine	190	Periodic	Once within 4 months of the issue date of the permit or the date when the generator is first put into operation, whichever is later and every 3 years thereafter	MCERTS BS EN 14792
	Carbon monoxide	Diesel engine	No limit set	Periodic	Once within 4 months of the issue date of the permit or the date when the generator is first put into operation, whichever is later and every 3 years thereafter	MCERTS BS EN 15058
Note 1: Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O ₂ content of 15% for engines.						

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			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.2.1.	DG1 to DG6	Once within 4 months of the issue date of the permit or the date when the generator is first put into operation, whichever is later and every 3 years thereafter	1 January

Table S4.2 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Emissions to Air Reporting Form or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021

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 24 hours of detection	
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	
Best estimate of the quantity or rate of release of substances	
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	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the breach of permit conditions not related to limits	
To be notified within 24 hours of detection	
Condition breached	
Date, time and duration of breach	
Details of the permit breach i.e. what happened including impacts observed.	
Measures taken, or intended to be taken, to restore permit compliance.	

(d) 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 practicable

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	

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	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

“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.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“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.

“first put into operation” means that the plant must have been fired with its design fuel up to its full load. This can be, but does not have to be, during commissioning.

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

“medium combustion plant” or “MCP” means a combustion plant with a rated thermal input equal to or greater than 1 MW but less than 50 MW.

“Medium Combustion Plant Directive” or “MCPD” means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“operating hours” means the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods.

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

“specified generator” has the meaning given in paragraph 2(1) of Schedule 25B of The EP Regulations.

“tranche A generator” has the meaning given in paragraph 3(3) of schedule 25B of The EP Regulations.

“tranche B generator” is any generator that is not a Tranche A generator.

“year” means calendar year ending 31 December.

Schedule 7 – Annex 1 of MCPD

1. Rated thermal input (MW) of the medium combustion plant.	6 x 1.1 MWth generators
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Diesel engines
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Gas oil (diesel)
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	07/2022
5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code).	E.37
6. Expected number of annual operating hours of the medium combustion plant and average load in use.	DG1 to DG4: 8,760 hours per generator per year DG5: 168 hours per year DG6: 50 hours per year All generator to operate at 56.5% load
7. Where the option of exemption under Article 6(3) or Article 6(8) is used, a declaration signed by the operator that the medium combustion plant will not be operated more than the number of hours referred to in those paragraphs.	N/A
8. Name and registered office of the operator and, in the case of stationary medium combustion plants, the address where the plant is located.	<p>Name and address of the operator:</p> United Utilities Water Limited Haweswater House Lingley Green Avenue Lingley Mere Business Park Great Sankey Warrington WA5 3LP <p>Address where the plant is located:</p> IFAS Power Island Ellesmere Port Wastewater Treatment Works Little Stanney Chester CH2 4HZ

END OF PERMIT