



Environment
Agency

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Greene King Limited
Abbott House Westgate Brewery
Westgate Street
Bury St Edmunds
Suffolk
IP33 1QT

Variation application number

EPR/BO1122IA/V005

Permit number

EPR/BO1122IA

Abbot House Westgate Brewery

Permit number EPR/BO1122IA

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. All the conditions of the permit have been varied and are subject to the right of appeal.

This consolidated permit has been issued following a full review against the best available techniques (BAT) conclusions for the Food, Drink and Milk Industries published on 4th December 2019 in the official journal of the European Union.

We have implemented the requirements of the Medium Combustion Plant directive and incorporated post-dated requirements for 2025 and 2030.

The schedules specify the changes made to the permit.

The main features of the installation

Abbot House Westgate Brewery is an installation located in Bury St Edmunds, Suffolk, the site is centred as NGR TL 85630 63779. The site is in an urban and residential area. The installation comprises four main areas each of which comprise buildings and outside areas.

The sites process produces beer by extracting sugars and carbohydrates from milled, malted barley using hot liquor to produce a sugary solution called wort. The wort is boiled with hops to impart bitterness to the product and syrup is added to increase the level of fermentable extract. The wort is then cooled, fermented with yeast and is matured and filtered before packaging into kegs.

The site carries out pH adjustment on process effluent prior to discharge to sewer.

The Environmental Permitting is for the following scheduled activities:

Section 6.8 Part A(1)(d)(ii) – the treatment and processing for the production of food from only vegetable raw materials with a finished product production capacity greater than 300 tonnes per day.

Section 5.4 Part A(1)(a)(ii) - Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment via pH adjustment.

Production capacity is limited to 300 tonnes per day, with manufacturing carried out up to 24 hours per day, 7 days per week.

There are emissions to air of particulates from the process operations associated with the handling of malt, abated via bag filters. There are also emissions of combustion gases from the onsite boilers, which consist of two 13.2MWth and two 2.5MWth boilers fuelled on natural gas.

The site has emissions of process effluent which have been treated which are discharged to the Anglian Water sewer via 7 emission points. The site also discharges uncontaminated surface water runoff to the River Linnet.

The Breckland Special Protection Area is within 10 km of the installation. The Glen Chalk Caves, Bury St Edmunds Site of Special Scientific Interest (SSSI) and Horringer Court Caves SSSI, and a Local Nature Reserve are within 2km of the Installation.

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.

Status log of the permit		
Description	Date	Comments
Application BO1122IA received	Duly made 06/05/2005	
Request for further information	09/09/2005	Response dated 05/10/05 & 31/10/05
Request to extend determination	23/09/2005	Response 13/10/05
Permit determined	19/12/2005	Permit issued to Scottish Courage Ltd.
Variation notice application CP3336LE	05/05/2006	
Request for further information	09/11/2006	Response received 22/11/06
Variation notice CP3336LE	07/12/2006	
Application EPR/BO1122IA/V003	07/07/2011	
Variation determined EPR/BO1122IA	12/08/2011	
Notified of change of Company Name	04/12/2019	Name changed to Greene King Limited.
Variation issued EPR/BO1122IA/V004	09/12/2019	Varied permit issued to Greene King Limited.
Application EPR/BO1122IA/V005 (variation and consolidation)	Regulation 61 Notice response received 07/10/2022	Environment Agency initiated variation and consolidation following the Food, Drink & Milk Industries sector permit review.
Request for further information sent 17/08/2023	11/09/2023	Information relating to BAT6, BAT11, site plan, and production capacity.
Variation determined and consolidation issued EPR/BO1122IA (Billing ref. KP3120PH).	01/12/2023	Varied and consolidated permit issued in modern format

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

Permit number

EPR/BO1122IA

Issued to

Greene King Limited (“the operator”)

whose registered office is

Westgate Brewery

Bury St Edmunds

Suffolk

IP33 1QT

company registration number 00024511

to operate a regulated facility at

Abbott House, Westgate Brewery

Westgate Street

Bury St Edmunds

Suffolk

IP33 1QT

to the extent set out in the schedules.

The notice shall take effect from 01/12/2023.

Name	Date
Stacey Tapsell	01/12/2023

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/BO1122IA

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BO1122IA/V005 authorising,

Greene King Limited (“the operator”),

whose registered office is

Westgate Brewery

Bury St Edmunds

Suffolk

IP33 1QT

company registration number 00024511

to operate an installation at

Abbott House, Westgate Brewery

Bury St Edmunds

Suffolk

IP33 1QT

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

Name	Date
Stacey Tapsell	01/12/2023

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, 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.

1.2 Energy efficiency

- 1.2.1 The operator shall:
- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
 - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
 - (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
 - (b) maintain records of raw materials and water used in the activities;
 - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
 - (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that:
- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
 - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

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 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

- (a) the nature of the process producing the waste;
- (b) the composition of the waste;
- (c) the handling requirements of the waste;
- (d) the hazardous property associated with the waste, if applicable; and
- (e) the waste code of the waste.

2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.

- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.
- 3.1.4 For the following activities referenced in schedule 1, table S1.1 (AR3 [2x 2.5MWth boilers]) the first monitoring measurements shall be carried out within four months of 01/01/2030 for boilers 3 & 4, or of the date when the MCP is first put into operation, whichever is later.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

- 3.5.1 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, S3.2 and S3.3.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 unless otherwise agreed in writing by the Environment Agency.

3.6 Pests

- 3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.6.2 The operator shall:
 - (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
 - (b) implement the pests management plan, from the date of approval, 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, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

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 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) the annual production/treatment data set out in schedule 4 table S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 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 S4.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition 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;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit 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:
- (a) any change in the operator's name or address; and
 - (b) any steps taken with a view to the dissolution of the operator.
- In any other case:
- (a) the death of any of the named operators (where the operator consists of more than one named individual);
 - (b) any change in the operator's name(s) or address(es); and
 - (c) 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.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
 - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
 - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

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			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
AR1	Section 6.8 Part A(1) (d)(ii)	Treating and processing for the production of food from only vegetable raw materials with a finished product production capacity greater than 300 tonnes per day.	From receipt of raw materials to dispatch of finished products of Beer Production capacity is limited to 300 tonnes per day.
AR2	S5.4 Part A (1)(a)(ii)	Disposal of non-hazardous waste in a facility with a capacity exceeding 50 tonnes per day by physico-chemical treatment via pH adjustment.	Collection and treatment of process effluent prior to dispatch to Anglian Water service Ltd sewer.
Directly Associated Activity			
AR3	Steam supply	<u>Medium Combustion Plants</u> 2 x 13.2 MWth natural gas fired boilers 2 x 2.5 MWth natural gas fired boilers	From receipt of fuel to release of products of combustion to air.
AR4	Use of refrigerants	Use of refrigerants in cooling, chilling and/or freezing systems at the installation.	From receipt of raw materials to dispatch of final product.
AR5	Compressed air plant	Operation of air compressors, driers and receivers	Site services systems supplying process plant with compressed air across the installation.
AR6	Laboratories	Quality control laboratories serving production	Activities carried out within the installation laboratories.
AR7	Waste storage and handling	Handling and storage of wastes on site to removal off site including to the onsite ETP	From generation of waste to storage pending removal for disposal or recovery.
AR8	Water treatment plant	Water treatment.	Treatment of mains water prior to its use as a raw material in the brewing and cleaning process.
AR9	Discharge of uncontaminated site run – off to surface water	Discharge of uncontaminated site run – off to surface water	Discharge of uncontaminated surface water run – off to unnamed drainage ditches and then to River Linnet.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Regulation 61 (1) Notice – Responses to questions dated 07/06/2022	All parts	Received 07/10/2022

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC18	<p>The operator shall submit, for approval by Environment Agency, a report demonstrating achievement of the 'Narrative' BAT where BAT is currently not achieved but will be achieved before 4 December 2023. The report shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • Methodology applied for achieving BAT • Demonstrating that BAT has been achieved. <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 6. Refer to BAT Conclusions for a full description of the BAT requirement.</p>	04/12/2023
IC19	<p>The operator shall use refrigerants without ozone depletion potential and with a low global warming potential (GWP) in accordance with BAT 9 from the Food, Drink and Milk Industries BATCs.</p> <p>To demonstrate compliance against BAT 9, the operator shall develop a replacement plan for the refrigerant systems at the installation. This shall be incorporated within the existing environmental management system by the specified date.</p> <p>The plan should include, but not be limited to, the following:</p> <ul style="list-style-type: none"> • Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible. • An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP. • Replacement of systems containing HCFCs as soon as possible. Only to be included where operator has confirmed use of R22 in "legacy system" in their Reg 61 response 	04/12/2023
IC20	<p>The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) where BAT is currently not achieved but will be achieved before 4 December 2023.</p> <p>The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> 1) Performance against the BAT-AELs. 2) Methodology applied for reaching the BAT-AELs. 3) The report shall address the BAT Conclusions for Food, Drink and Milk industries with respect to the following: 	04/12/2023

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<ul style="list-style-type: none"> BAT 20 Table 7 (compliance with BAT-AELs for channelled dust emissions to air from handling and processing of malt and adjuncts) <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	
IC21	<p>The Operator shall submit a written report to the Environment Agency of monitoring carried out to determine the size distribution of particulate matter in the exhaust gas emissions to air from emission point A6 and A7 identifying the fractions within the PM10 and PM2.5 ranges. The monitoring shall be carried out under representative operating conditions and shall be in accordance with EN ISO 23210 unless otherwise agreed with the Environment Agency.</p>	01/12/2024 (12 months from permit issue) or other date as agreed in writing with the Environment Agency
IC22	<p>The operator shall produce a climate change adaptation plan, which will form part of the EMS.</p> <p>The plan shall include, but not be limited to:</p> <ul style="list-style-type: none"> Details of how the installation has or could be affected by severe weather; The scale of the impact of severe weather on the operations within the installation; An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation. <p>The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.</p>	01/12/2024 (12 months from permit issue) or other date as agreed in writing with the Environment Agency
IC23	<p>The Operator shall submit a report of a feasibility study into recovery of carbon dioxide generated during the fermentation stage. The report shall take into account information provided in Chapter 4.4.4.3 of the Food Drink and Milk Industries BREF and will quantify current emissions of carbon dioxide from the fermenters. Where recovery is feasible, the report shall include timescales for implementation.</p>	01/06/2025 (18 months from permit issue) or other date as agreed in writing with the Environment Agency
IC24	<p>Submit an updated emission point plan to the Environment Agency for approval. The plan must demonstrate the location of all point emissions to air and water.</p> <p>The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the plan.</p>	01/06/2024 6 months from date of permit issue

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
--	--

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 as shown on the site plan in Schedule 7	Boiler 1 Boiler 2 2x 13.2MWth natural gas fired boilers	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	300 mg/m ³ limit applies until 31/12/2024	Periodic	Annual	BS EN 14792
			200 mg/m ³ limit applies from 01/01/2025	Periodic	Annual	BS EN 14792
		Carbon monoxide	No Limit	Periodic	Annual	MCERTS BS EN15058
A2 & A3 [Shown as A2a & A2b on site plan in schedule 7]	Fermentation Vessels Vent	No Parameters set	No limit set	--	--	--
A4 [Shown as A5, A3(a), A3(b), A3(c) and A3(d) on site plan in Schedule 7	Draught Beer Boiler 1 Boiler 2 2x 2.5MWth natural gas boilers	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	250 mg/m ³ Limit applies from 01/01/2030	Periodic	Every three years	BS EN 14792 [NOTE 1]
		Carbon monoxide	No Limit	Periodic	Every three years	MCERTS BS EN15058 [NOTE 1]
A5 [Shown as A9 on site plan in schedule 7	Wort boiling vent	No parameters set	No limit set	--	--	--
A6 [Shown as A6a] on site plan in schedule 7	Malt handling building extraction system via bag filter	Particulate matter	10 mg/m ³ Limit applies from 04/12/2023	Average over sampling period	Annually	BS EN 13284-1
A7 [Shown as A6b] on site plan in schedule 7	Malt handling building extraction system via bag filter	Particulate matter	10 mg/m ³ Limit applies from 04/12/2023	Average over sampling period	Annually	BS EN 13284-1
A8 [Shown as A13] on site plan in schedule 7	Ammonia scrubber vent	No parameters set	No limit set	--	--	--
NOTE 1 – Emission limit and/or monitoring requirements apply from 1 January 2030, unless otherwise advised by the Environment Agency						

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 emission to River Linnet	Uncontaminated drainage from site via oil interceptor	No parameters Set	No limit set	--	--	--
W2 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W3 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W4 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W5 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W6 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W7 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W8 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W9 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W10 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W11 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W12 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W13 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W14 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--
W15 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W17 emission to River Linnet	Uncontaminated drainage from site	No parameters Set	No limit set	--	--	--

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site–emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 [Shown as Point A on site plan in Schedule 7] emission to Anglian Water sewer	Process effluent arising from brewing and fermenting of beers and ales after pH adjustment	No parameters Set	No limit set	--	--	--
S2 [Shown as Point C on site plan in Schedule 7] emission to Anglian Water sewer	Process effluent fermentation of beers and ales (Yeast floor), cooling towers, and water treatment regeneration back washes after pH adjustment	No parameters Set	No limit set	--	--	--
S3 [Shown as Point F on site plan in Schedule 7] emission to Anglian Water sewer	Process effluent from packaging of beer and lager after pH adjustment	No parameters Set	No limit set	--	--	--
S4 [Shown as Point G on site plan in Schedule 7] emission to Anglian Water sewer.	Process effluent arising from the fermenting of beers and ales, and boiler blowdown water after pH adjustment	No parameters Set	No limit set	--	--	--
S5 [Shown as Point H on site plan in Schedule 7] emission to Anglian Water sewer	Effluent from a quality control laboratory serving the brewery	No parameters Set	No limit set	--	--	--
S6 [Shown as Point J on site plan in Schedule 7] emission to Anglian Water sewer.	Effluent from external jet washing of vehicles via an oil interceptor	No parameters Set	No limit set	--	--	--
S7 [Shown as Point M on site plan	Effluent brewery product from a taste testing and quality	No parameters Set	No limit set	--	--	--

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
in Schedule 7] emission to Anglian Water sewer	control facility for the brewery					

Schedule 4 – Reporting

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

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Point source emissions to air	A6, A7, A1	Every 12 months	1 January
Parameters as required by condition 3.5.1	A4	First monitoring undertaken in accordance with Condition 3.1.4 to be reported within 3 months, and then every 3 years thereafter.	From first monitoring requirements in accordance with Condition 3.1.4

Parameter	Units
Production of beer	hectolitres
Wastewater treated	tonnes

Parameter	Frequency of assessment	Units
Water usage	Annually	m ³
Energy usage	Annually	MWh
Waste – recovery/disposal routes	Annually	tonnes
COD efficiency	Annually*	COD te/te product
Food waste	Annually	tonnes

*COD efficiency to be calculated on a weekly frequency, reported annually

Parameter	Reporting form	Form version number and date
Point source emissions to air	Emissions to Air Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Point source emissions to sewer	Emissions to Sewer Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Water usage	Water Usage Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Energy usage	Energy Usage Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Waste Return	Waste Return Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021

Table S4.4 Reporting forms		
Parameter	Reporting form	Form version number and date
Other performance parameters	Other Performance Parameters 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.

“average over the sampling period” means the average value of three consecutive measurements of at least 30 minutes each, unless otherwise stated, as defined in the General Considerations section of the Food, Drink & Milk Industries BAT Conclusions.

“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.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“Food waste” reporting: Reporting of food waste to use a methodology such as the global Food Loss and Waste Accounting and Reporting Standard (FLW standard), WRAP’s Target Measure Act initiative or similar.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“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. An “existing medium combustion plant” is combustion plant operating before 20 December 2018.

“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.

“Pests” means Birds, Vermin and Insects.

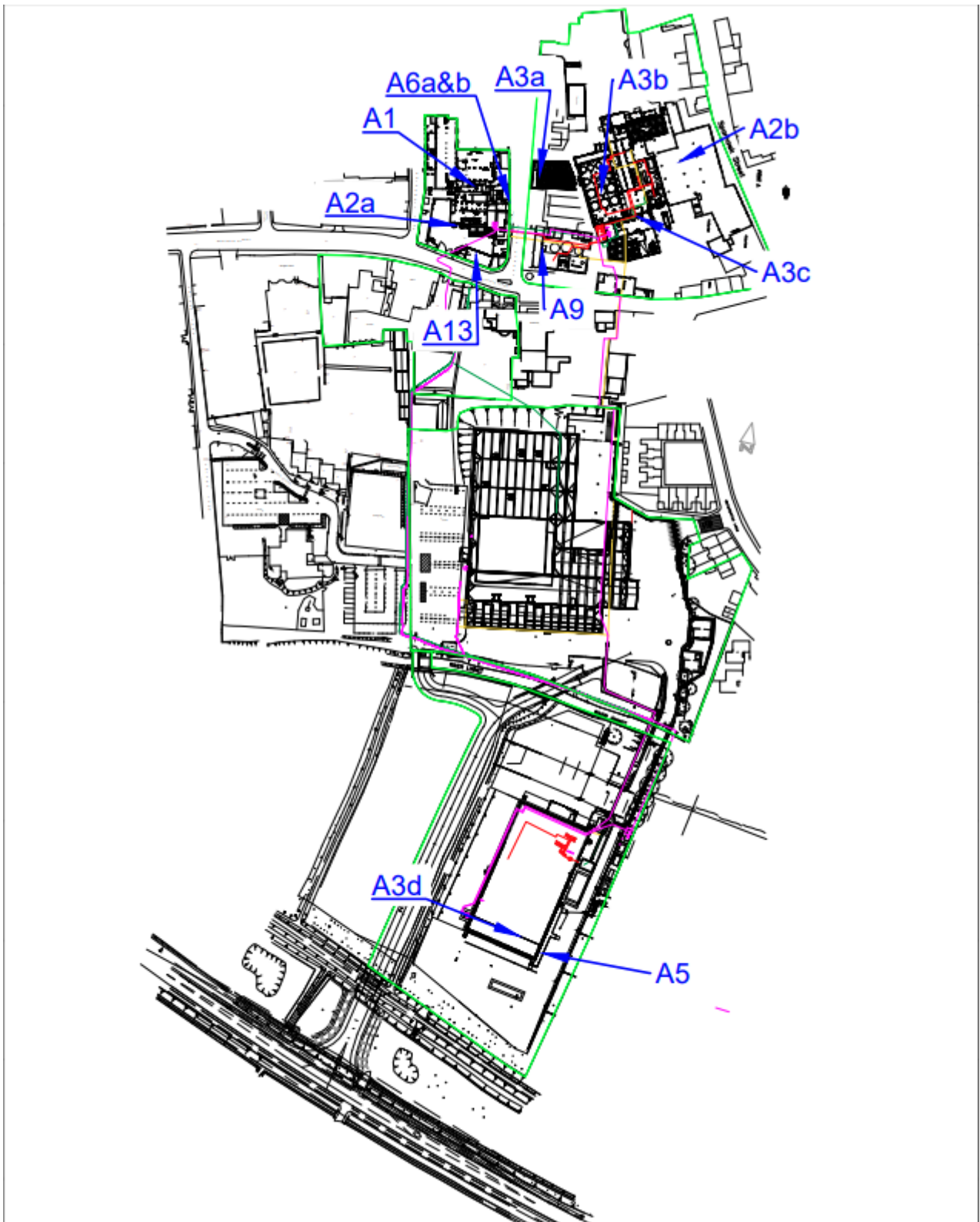
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

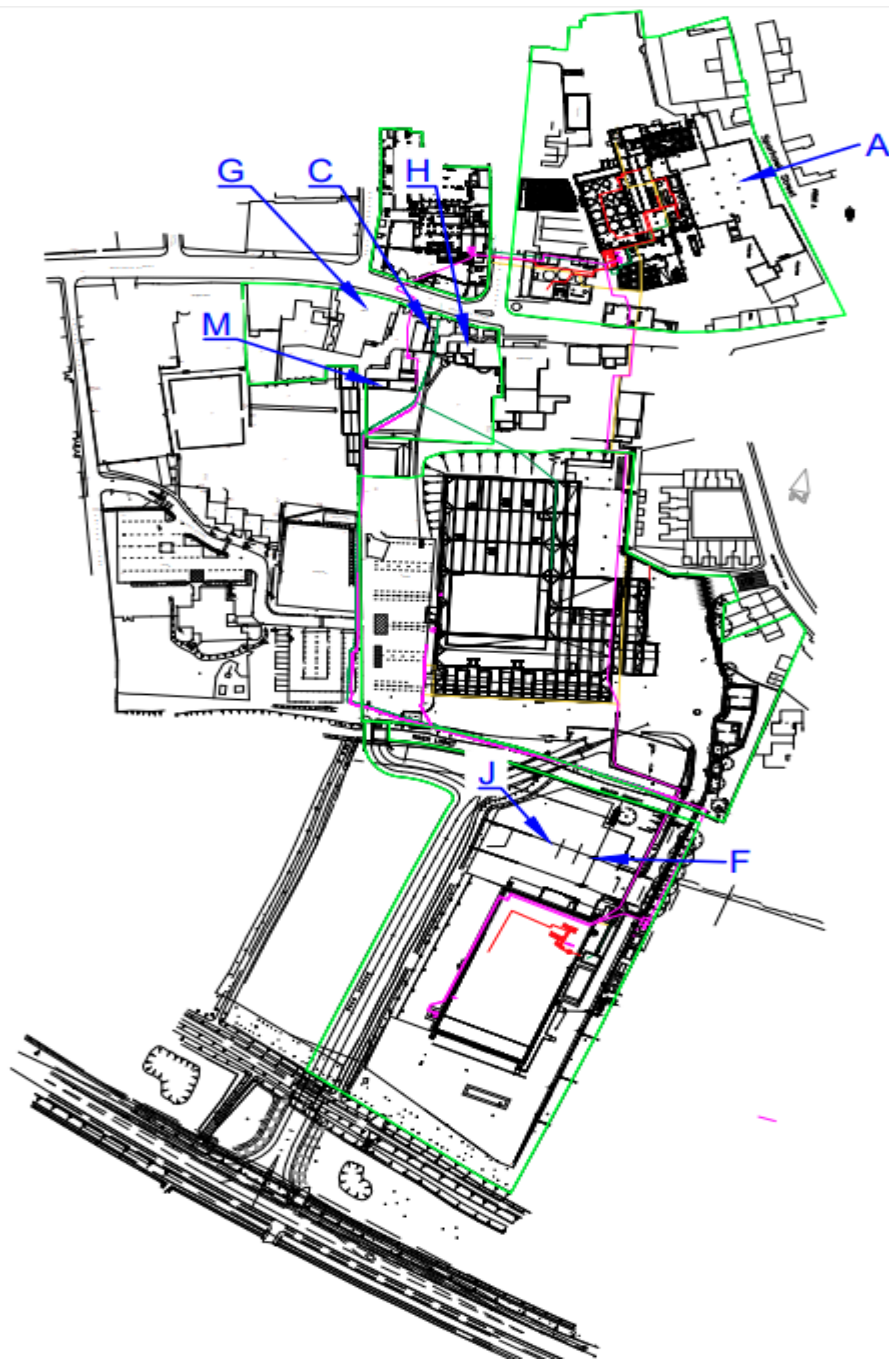
Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
 - in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

“year” means calendar year ending 31 December.

Schedule 7 – Site plan





END OF PERMIT

Signed: *[Name]*

Date: *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

Guidance for use: Use this form to report your monitoring results.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Complete columns 1 to 5 using the information from schedule 3 of your permit. Complete columns 6 to 8 with your monitoring data. Add additional rows as necessary.

- ¹ Where an internationally recognised standard test method is used, give the reference number. Where another method that has been formally agreed with the Environment Agency, give the appropriate identifier. In other cases state the principal technique, for example gas chromatography.
- ² Give the result as the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, give the result as the 'minimum to maximum' of the measured values.
- ³ For non-continuous measurements give the date and time of the sample that produced the result. For continuous measurements give the percentage of the process operating time covered by the result.
- ⁴ Complete if the uncertainty associated with the result is not a 95% confidence interval. Leave blank for 95% confidence intervals.

Emissions to Water Reporting Form

Permit number: EPR/BO1122IA

Operator: Greene King Limited

Facility name: Abbot House Westgate Brewery

Emissions to Water Reporting Form: version 1, 08/03/2021

Reporting of emissions to air for the period from [DD/MM/YY] to [DD/MM/YY]

Emission point	Substance / parameter	Emission Limit Value	Reference period	Test method ¹	Result ²	Sample dates and times ³	Uncertainty ⁴
<i>[e.g. W1]</i>	<i>[e.g. Total suspended solids]</i>	<i>[e.g. 30 mg/l]</i>	<i>[e.g. For 95% of all measured values of periodic samples taken over one month]</i>	<i>[e.g. BS EN 872:2005]</i>	<i>[State result]</i>	<i>[State relevant dates and time periods]</i>	<i>[State uncertainty if not 95% confidence interval]</i>

Signed: [Name]

Date: [DD/MM/YY]

(Authorised to sign as representative of the operator)

Guidance for use: Use this form to report your monitoring results.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Complete columns 1 to 5 using the information from schedule 3 of your permit. Complete columns 6 to 8 with your monitoring data. Add additional rows as necessary.

- ¹ Where an internationally recognised standard test method is used, give the reference number. Where another method that has been formally agreed with the Environment Agency, give the appropriate identifier. In other cases state the principal technique, for example gas chromatography.
- ² Give the result as the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, give the result as the 'minimum to maximum' of the measured values.
- ³ For non-continuous measurements give the date and time of the sample that produced the result. For continuous measurements give the percentage of the process operating time covered by the result.
- ⁴ Complete if the uncertainty associated with the result is not a 95% confidence interval. Leave blank for 95% confidence intervals.

Water Usage Reporting Form

Permit number: EPR/BO1122IA

Operator: Greene King Limited

Facility name: Abbot House Westgate Brewery

Water Usage Reporting Form: version 1, 08/03/2021

Reporting of emissions to air for the period from *[DD/MM/YY]* to *[DD/MM/YY]*

Water source	Water usage (m³)	Specific water usage (m³/tonne of product) ²
Mains water	<i>[insert annual usage in m³ where mains water is used]</i>	Not Applicable
Site borehole	<i>[insert annual usage in m³ where water is used from a site borehole]</i>	Not Applicable
River abstraction	<i>[insert annual usage in m³ where abstracted river water is used]</i>	Not Applicable
Other – <i>[specify other water source where applicable]. Add extra rows where needed]</i>	<i>[insert annual usage in m³ where applicable]</i>	Not Applicable
Total water usage	<i>[insert total annual water usage in m³]</i>	<i>[insert total water use per tonne of product produced m³/t]</i>

Operator's comments

--

Operator's comments

Signed: *[Name]*

Date: *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

Guidance for use: Use this form to report your annual water usage.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Add additional rows as necessary.

Energy Usage Reporting Form

Permit number: EPR/BO1122IA

Operator: Greene King Limited

Facility name: Abbot House Westgate Brewery

Energy Usage Reporting Form: version 1, 08/03/2021

Reporting of emissions to air for the period from *[DD/MM/YY]* to *[DD/MM/YY]*

Energy source	Energy consumption / production (MWh)	Specific energy consumption (MWh/tonne of product) ²
Electricity imported as delivered - source [specify source, e.g. supplied from the national grid]	<i>[insert annual consumption in MWh where electricity is imported]</i>	Not Applicable
Electricity imported as primary energy ¹ – conversion factor of [specify conversion factor used to convert electricity delivered to primary energy]	<i>[insert annual consumption in MWh where electricity is imported]</i>	Not Applicable
Natural gas	<i>[insert annual consumption in MWh where natural gas is used]</i>	Not Applicable
Gas oil – conversion factor of [specify conversion factor used to convert tonnes to MWh]	<i>[insert annual consumption in MWh where gas oil is used]</i>	Not Applicable
Imported heat	<i>[insert annual consumption in MWh where heat is imported]</i>	Not Applicable
Other – <i>[specify other energy source and conversion factors where applicable, e.g. renewable fuel. Add extra rows where needed]</i>	<i>[insert annual consumption in MWh where applicable]</i>	Not Applicable
Total	<i>[insert total energy use in MWh]</i>	<i>[insert total energy use per tonne of product MWh/tonne of product]</i>

Operator's comments

Signed: *[Name]*

Date: *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

Guidance for use: Use this form to report your annual energy usage.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Add additional rows as necessary.

¹ Multiply delivered electricity by 2.4 to convert to primary energy where the electricity is supplied from the national grid. If the electricity is supplied from another source, specify the conversion factor used. Add additional rows as needed if electricity is imported from multiple sources.

² Divide energy consumption by an appropriate unit of raw material processed or product output.

Food Waste Reporting Form

Permit number: EPR/BO1122IA

Operator: Greene King Limited

Facility name: Abbot House Westgate Brewery

Food Waste Reporting Form: version 1, 06/02/2023

Reporting of food waste for the period from [DD/MM/YY] to [DD/MM/YY]

Overall food waste (tonnes)	
Food waste as % of product	
Food waste disposal routes	<i>As specified below</i>

Source	Tonnage
Redistribution for human consumption	
Animal feed	
Bio-based materials/biochemical processing (e.g. feedstock for other industrial products)	
Anaerobic digestion/codigestion	
Composting/aerobic processes	
Incineration/controlled combustion	
Land application	

Landfill	
Sewer/wastewater treatment (e.g. as COD)	
Other (Please specify)	

Signed: [Name]

Date: [DD/MM/YY]

(Authorised to sign as representative of the operator)

Guidance for use: Use this form to report your food waste metrics.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information.

Rationale: Avoidance of food waste is a key issue for the sector, both nationally and globally, and is subject to a United Nations Sustainable Development Goal: SDG 12.3: “By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses”.

This complements Defra’s Food and drink waste hierarchy: deal with surplus and waste - GOV.UK (www.gov.uk) and WRAP’s Target Measure Act Initiative.

Reporting of food waste should be to a set methodology such as the global Food Loss and Waste Accounting and Reporting Standard (FLW standard).

Other Performance Parameters Reporting Form

Permit number: EPR/BO1122IA

Operator: Greene King Limited

Facility name: Abbot House Westgate Brewery

Other Performance Parameters Reporting Form: version 1, 08/03/2021

Reporting of other performance parameters for the period from *[DD/MM/YY]* to *[DD/MM/YY]*

Parameter	Units
<i>[e.g. Total raw material usage]</i>	<i>[e.g. tonnes per production unit]</i>
Beer production	hectolitres
Wastewater treated	m ³
Waste sent for recovery (specify route)	tonnes
Waste sent for recycling (specify route)	tonnes
Total product waste sent for disposal (specify route)	tonnes

Operator's comments

Signed: *[Name]*

Date: *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

Guidance for use: Use this form to report the performance parameters (other than water and energy) required by your permit. Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. The parameters to report and units to be used can be found in the 'Performance parameters' table in schedule 4 of your permit. Add additional rows as necessary.