

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Damm 1876 Ltd

The Eagle Brewery Havelock Street Bedford Bedfordshire MK40 4LU

Variation application number

EPR/EP3844QU/V004

Permit number

EPR/EP3844QU

The Eagle Brewery Permit number EPR/EP3844QU

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 postdated requirements for 2025.

The schedules specify the changes made to the permit.

The Eagle Brewery installation is located close to the centre of Bedford adjacent to the River Great Ouse. The installation is centred at NGR TL 04050 49098.

The 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, casks, cans and bottles.

There is an onsite Effluent Treatment Plant (ETP) at the installation, treatment consists of pH correction prior to the discharge to sewer.

The Environmental Permit is for the following scheduled activities:

Section 6.8 Part A(1)(d)(ii) - Treatment and processing of vegetable raw materials for the intended production of food at a plant with a finished product 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 by pH adjustment.

The site produces approximately 1,000,000 hectolitres of brewed products per annum and packages another 400,000 hectolitres per annum. The installation is limited to produce up to 467 tonnes per day.

The ancillary activities that are undertaken at the site include:

- heat and steam generation from boilers
- compressed air generation from a number of electric air compressors
- refrigeration mainly using an ammonia plant
- in place cleaning using a dedicated system that automatically cleans some of the brewing vessels the remainder are done by hand
- CO2 recovery is planned in the form of a CO2 recovery plant

There are emissions from the installation to air and water. Spent grains and yeast that are removed from site are sent to farms as feedstock.

The emissions to sewer arise from the processes carried out at the site; a discharge consent is in place and managed by the sewerage undertaker. There are two discharge points directly to controlled water (River Great Ouse), and one discharge point to a soakaway, these are all from uncontaminated surface water runoff.

The emissions to air from site are dust from the handling and processing of malt and adjuncts and from the combustion plants on site. The site combustion sources include Boiler 1 - 7 MWth, Boiler 2 - 7 MWth, and Boiler 3 -10.5 MWth. All three boilers are fuelled on natural gas.

The site has a Climate Change Agreement (CCA) and operates a non-accredited environment management system (EMS).

There are no European designated sites within 10km and no Sites of Special Scientific Interest within 2km of the installation. However, there is one Local Nature Reserve are five Local Wildlife Sites within 2km of the installation.

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 BN4690IK	Received 24/03/2005	
Response to request for information dated 07/09/2005	Response 21/10/2005	
Permit determined BN4690IK	04/11/2005	Permit issued to Charles Wells Limited
Application MP3137LQ (full transfer of permit BN4690Ik)	Received 03/08/2006	Application to transfer the permit in full to Wells & Youngs Brewing Company Limited
Transfer determined EPR/MP3137LQ	14/08/2006	Full transfer of permit complete
Minor variation determined EPR/MP3137LQ/V002 (WP3539XT)	17/12/2007	Drafting anomalies removed
Agency variation determined EPR/MP3137LQ/V003	05/12/2013	Agency variation to implement the changes introduced by IED
Change of company name	30/01/2015	Name changed from Wells & Young's Brewing Company Limited to Charles Wells Brewery Limited
Application EPR/EP3831YX/T001 (full transfer of permit EPR/MP3137LQ)	Duly made 12/07/2017	Application to transfer the permit in full to Marston's PLC
Transfer determined EPR/EP3831YX	03/08/2017	Full transfer of permit complete
Application EPR/UP3002LV/T001 (full transfer of permit EPR/EP3831YX)	Duly made 24/02/2021	Application to transfer the permit in full to Marston's Beer Company Limited
Transfer determined EPR/UP3002LV	02/03/2021	Full transfer of permit complete
Application EPR/EP3844QU/T002 (full transfer of permit EPR/UP3002LV)	Duly made 05/09/2022	Application to transfer the permit in full to CMBC Supply limited
Transfer determined EPR/EP3844QU	26/09/2022	Full transfer of permit complete.
Application EPR/EP3844QU/V004 (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.

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Status log of the permit					
Description	Date	Comments			
Application EPR/EP3844QU/T002 (full transfer of permit EPR/EP3844QU)	Duly made 19/12/2022	Application to transfer the permit in full to Damm Brewery (UK) Limited			
Transfer determined EPR/EP3844QU	23/02/2023	Full transfer of permit complete.			
Notified of change of Company Name Administrative Variation EPR/EP3844QU/V003	23/06/2023	Name changed from Damm Brewery (UK) Limited to Damm 1876 Ltd			
Variation issued EPR/EP3844QU/V003	16/08/2023	Varied permit issued to Damm 1876 Ltd.			
Additional information requested for application EPR/EP3844QU/V004	01/09/2023	Additional information received resubmission and updated R61 response documents			
received	28/09/2023	Additional information relating to BATc1, BATc2, BATc6, & BATc9.			
	06/10/2023	Additional information relating to BATc9 and refrigerants onsite			
Variation (V004) determined and consolidation issued EPR/EP3844QU (Billing Reference: KP3043QW)	31/10/2023	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/EP3844QU

Issued to

Damm 1876 Ltd ("the operator")

whose registered office is

Prager Metis LLP 5a Bear Lane Southwark London SE1 0UH

company registration number 07243661

to operate a regulated facility at

The Eagle Brewery Havelock Street Bedford Bedfordshire MK40 4LU

to the extent set out in the schedules.

The notice shall take effect from 31/10/2023.

Name	Date
Stacey Tapsell	31/10/2023

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/EP3844QU

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/EP3844QU/V004 authorising,

Damm 1876 Ltd ("the operator"),

whose registered office is

Prager Metis LLP 5a Bear Lane Southwark London SE1 0UH

company registration number 07243661

to operate an installation at

The Eagle Brewery Havelock Street Bedford Bedfordshire MK40 4LU

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

Name	Date
Stacey Tapsell	31/10/2023

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) the first monitoring measurements shall be carried out within four months of 01/01/2025 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
- 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
- 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 ac	ctivities		
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 in the form of bottles, cans, kegs, and casks. Production capacity is limited to 467 tonnes per day.
AR2	Section 5.4 Part A(1) (a) (ii)	Physico-chemical Treatment of non- hazardous waste waters by pH adjustment.	From generation of wastewater to discharge to Anglian Water sewer.
Directly Asso	ociated Activity		
AR3	Steam supply	Medium Combustion plants: 2 x 7 MWth natural gas- fired boilers 1 x 10.5 MWth natural gas- fired boiler	From receipt of fuel to release of products of combustion to air.
AR4	Use of refrigerants	Use of refrigerants in cooling and chilling systems at the installation.	From receipt of raw materials to dispatch of final product.
AR5	Storage and use of chemicals and oils	Storage and use of chemicals and oils at the installation.	From receipt of chemicals and oils to disposal of wastes arising.
AR6	Waste storage and handling	Storage and handling of waste materials	From generation of waste to storage pending removal for disposal or recovery.
AR7	Surface water drainage	Collection of uncontaminated site surface waters	Handling and storage of site drainage until discharge to the Great Ouse Rive via interceptors and a soakaway ditch.
AR8	Carbon Dioxide Recovery	Recovery of CO ₂ from the fermentation process	From generation of CO ₂ to recovery, management and use.

Table S1.2 Operating techniques					
Description	Date Received				
Regulation 61 (1) Notice – Response updated document dated 19/07/2023	All parts	Received 01/09/2023			
Additional information	Updated R61 Response Tool	28/09/2023			

Reference	Requirement	Date	
IP6	 The operator shall submit, for approval by Environment Agency, a report setting out how the 'Narrative' BAT where BAT is currently not achieved has been achieved before 4 December 2023. The report shall include, but not be limited to, the following: Methodology for achieving BAT. Associated targets /timelines for reaching compliance by 4 December 2023. How BAT has achieved compliance. The report shall address the compliance with BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 1 and 5. Refer to BAT Conclusions for a full description of the BAT requirement. 	04/12/2023	
IP7	 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. The report shall include, but not be limited to, the following: Performance against the BAT-AELs. Methodology applied for reaching the BAT-AELs. The report shall address the BAT Conclusions for Food, Drink and Milk industries with respect to the following: BAT 20 Table 7 (compliance with BAT-AELs for channelled dust emissions to air from handling and processing of malt and adjuncts) 	04/12/2023	
IP8	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 A8 identifying the fractions within the PM ₁₀ and PM _{2.5} 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.	31/10/2024 unless otherwise agreed in writing with the Environment Agency	
IP9	 The operator shall produce a climate change adaptation plan, which will form part of the EMS. The plan shall include, but not be limited to: 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. The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency. 	31/10/2024 unless otherwise agreed in writing with the Environment Agency	

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 Po	oint source emiss	ions to air – e	mission limits	and monitor	ing requireme	nts
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1a on emissions to air plan in Schedule 7	Boiler 1 (7MWth)	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	200 mg/m ³ [NOTE 1]	Periodic	Every three years	BS EN 14792 ^[NOTE 1]
		Carbon monoxide	No Limit [NOTE 1]	Periodic	Every three years	MCERTS BS EN 15058 ^[NOTE 1]
	Boiler 2 (7MWth)	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	200 mg/m ³ [NOTE 1]	Periodic	Every three years	BS EN 14792 ^[NOTE 1]
		Carbon monoxide	No Limit [NOTE 1]	Periodic	Every three years	MCERTS BS EN 15058 ^[NOTE 1]
A1b on emissions to air plan in Schedule 7	Boiler 3 (10.5MWth)	Oxides of Nitrogen (NO and NO ₂ expressed as NO _x)	200 mg/m ³ [NOTE 1]	Periodic	Every three years	BS EN 14792 ^[NOTE 1]
		Carbon monoxide	No limit set [NOTE 1]	Periodic	Every three years	MCERTS BS EN 15058 ^[NOTE 1]
A2a & A2b on emissions to air plan in Schedule 7	Fermentation vessels CO ₂ purge vents	No parameters set	No limit set			
A3a – A3b, A4a & A4b, and A5 on emissions to air plan in Schedule 7	Cask racking and filling; bright beer tanks storage; and copper vessels vent	No parameters set	No limit set			
A6 on emissions to air plan in Schedule 7	Milling barley vent via filter bag	Particulate matter	10 mg/m ³ [Note 2]	Average over sampling period	Annually	BS EN 13284-1
A7 on emissions to air plan in Schedule 7	CO ₂ recovery vent	No parameters set	No limit set			

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A8 on emissions to air plan in Schedule 7	Filter room local exhaust ventilation via bag filter	Particulate matter	10 mg/m ³ [Note 2]	Average over sampling period	Annually	BS EN 13284-1
A9 on emissions to air plan in Schedule 7	Bulk bag station barley / hop vent via bag filter not discharged to the atmosphere	No parameters set	No limit set			
A10 on emissions to air plan in Schedule 7	Large pack extraction fans	No parameters set	No limit set			
A11 – A13 on emissions to air plan in Schedule 7	Boiler 1 – 3 steam system	No parameters set	No limit set			
A14 – A17 on emissions to air plan in Schedule 7	Electric engineering hot water boiler, office, eagle centre and Northgate hot water boilers	No parameters set	No limit set			
A18 on emissions to air plan in Schedule 7	Steam PRV across plant on Plate pack heat exchangers and vessels	No parameters set	No limit set			
A19 on emissions to air plan in Schedule 7	Brew house extraction fans	No parameters set	No limit set			
A20 on emissions to air plan in Schedule 7	Cooling tower	No parameters set	No limit set			

NOTE 1 – Emission limit and/or monitoring requirements apply from 1 January 2025, unless otherw advised by the Environment Agency

NOTE 2 – This emission limit applies from 4 December 2023, unless otherwise advised by the Environment Agency.

Table S3.2 Point Source emissions to water (other than sewer) and land - emis	sion limits and
monitoring requirements	

monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on emissions to water plan in schedule 7 emission to Great River Ouse	Uncontaminated surface water runoff from site roofs and surfaces via interceptor	No parameters set	No limit set			
W2 on emissions to water plan in schedule 7 emission to Great River Ouse	Uncontaminated surface water runoff from site roofs and surfaces via interceptor	No parameters set	No limit set			
W3 on emissions to water plan in schedule 7 emission to Great River Ouse	Uncontaminated surface water runoff from site roofs and surfaces via soakaway ditch	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
S2 on emissions to water plan in schedule 7 emission to Anglian Water – Summerhouse Hill Sewage Treatment Works	Treated process effluent from onsite effluent treatment plant	No parameters Set	No limit set			

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
Point source	A6, A8	Every 12 months	1 January
emissions to air Parameters as required by condition 3.5.1	A1a, A1b	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

Table S4.2: Annual production/treatment	
Parameter	Units
Production of beer	hectolitres
Wastewater treated	tonnes
CO ₂ Recovery	tonnes

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	m ³
Energy usage	Annually	MWh
Waste	Annually	tonnes
COD efficiency	Annually*	COD te/te product
Food waste	Annually	tonnes
*COD efficiency to be calculated on a weekly frequency, reported annually		

Table S4.4 Reporting forms			
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	
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	
Food Waste	Food waste Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1 06/02/2023	
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	
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.

"emissions to land" includes emissions to groundwater.

"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.

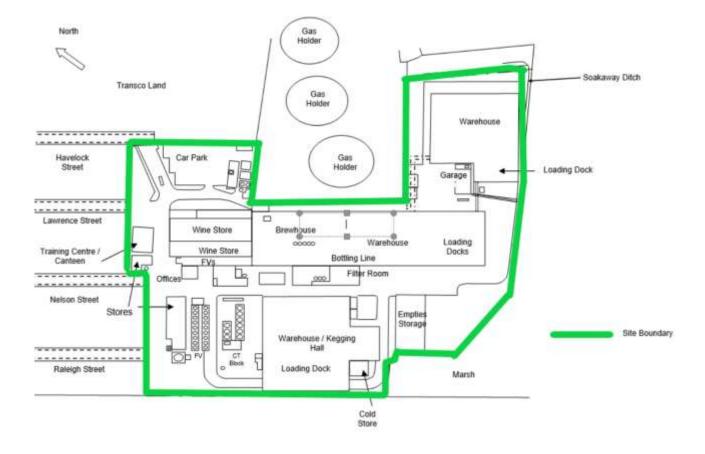
Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

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 other than gas engines or gas turbines, 6% dry for solid fuels; and/or

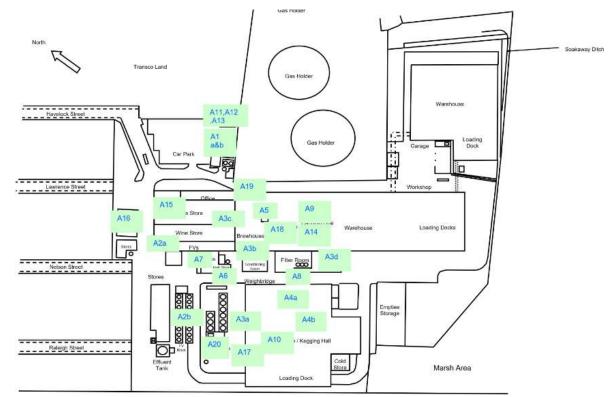
 in relation to emissions from gas engines or gas turbines, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 15% dry for liquid and gaseous fuels; and/or • in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

"year" means calendar year ending 31 December.

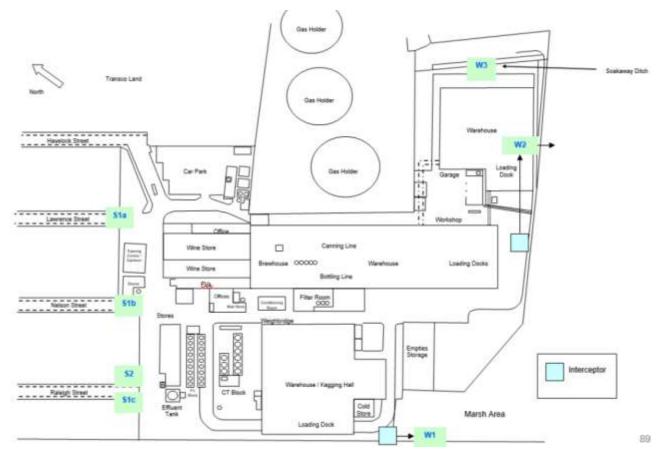
Schedule 7 – Site plan



Emissions to air plan



Emissions to water plan



END OF PERMIT