

# Notice of variation and consolidation with introductory note

**The Environmental Permitting (England & Wales) Regulations 2016**

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Heineken UK Limited

Bulmers Cider Mills  
The Cider Mills  
Plough Lane  
Hereford  
Herefordshire  
HR4 0LE

**Variation application number**

EPR/BN3138IG/V009

**Permit number**

EPR/BN3138IG

# Bulmers Cider Mills

## Permit number EPR/BN3138IG

### 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 4<sup>th</sup> 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.

Bulmers Cider Mills is located on Plough Lane in the northwest of the city of Hereford, the site is centred at national grid reference SO 50369 40424. The site manufactures and packs a range of beverage products including various ciders.

The Environmental Permit is for the following scheduled activities:

*Section 6.8 A(1)(d)(ii) – Treatment and processing, other than exclusively packaging, of only vegetable raw materials with a finished product production capacity greater than 300 tonnes per day.*

*Section 5.4 A(1)(b)(i): Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day by biological treatment including aerobic and anaerobic digestion.*

The installation produces a range of ciders. The ciders are fermented from apple juice concentrate and apple juice, and undergo processing by way of maturation, filtration, blending and pasteurisation. The cider products are packaged in bottles, cans and kegs and are filled into road tankers for delivery in bulk to customers who undertake final packaging.

The installation operates an effluent treatment plant (ETP), which includes biological treatment via anaerobic digestion. Effluent is directed to a balance tank, which includes a diffused aeration and jet mixing system. The balance tank ensures a consistent composition of effluent feed to the ETP and prevents shock loadings entering the sewer. Effluent which exceeds acceptable organic carbon concentration limits is directed to a divert tank. Flow will continue to be directed into the divert tank until the effluent is back within acceptable limits. Once in the divert tank the effluent can be blended back into the balance tank or loaded into a tanker for off-site disposal.

The effluent exits the balance tank via an in-line carbon dioxide pH correction system and is subsequently fed into one of up to four expanded granular sludge bed reactors that will reduce the COD load prior to discharge to sewer.

All process effluent is treated by the ETP, after treatment this effluent is discharged to sewer via emission point S5. The permit also includes emission points S1 – S4 to sewer, which are only to be used in an emergency.

The main emissions to air are of combustion gases from the sites three boilers, these are classified as medium combustion plants, the thermal input capacities of these plants are 2 x 11 MWth and 1 x 4 MWth. The boilers are fuelled with natural gas only or fuelled by natural gas and biogas co-fired. The biogas is

generated from the onsite anaerobic digestion plant. The site has a gas burner which flares biogas in emergency situations.

The site also has a carbon dioxide recovery plant which recovers carbon dioxide from the fermentation process for use at the site.

The River Wye Special Area of Conservation (SAC) and Afon Gwy SAC are European designated sites which are located within 10 km of the installation. River Wye Site of Special Scientific Interest (SSSI) and 33 Local Wildlife Sites (LWSs) are located within 2 km of the installation.

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

<b>Status log of the permit Part A</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application BN3138IG	Received 06/01/2005	
Response to request for additional information	Request 31/03/2005, 19/10/2005, & 27/10/2005	06/06/2005, 14/07/2005, 23/11/2005 & 01/12/2005
Permit determined EPR/BN3138IG/A001	19/12/2005	
Notification of administrative changes (EPR/BN3138IG/V002)	Received 03/09/2008	
Variation EPR/BN3138IG/V002 issued	16/9/2008	
Variation EPR/BN3138IG/V003 issued	25/11/2009	
Partial surrender application	24/12/2010	
Partial surrender of permit EPR/BN3138IG/S004	14/01/2011	
Application EPR/BN3138IG/V005 (variation)	Duly made 23/08/2012	Application to vary permit to include steam generating plant and extend installation boundary.
Additional Information Received	12/11/2012	Additional modelling and confirmation of plant provider and BAT standards.
Variation determined EPR/BN3138IG/V005	12/12/2012	Varied permit issued.
Application EPR/BN3138IG/V006 (variation & consolidation)	Duly made 27/01/2015	Application to vary permit, new production facilities, and consolidate with permit EPR/MP3434ZZ
Variation and consolidation issued	24/04/2015	
Application EPR/BN3138IG/V009 (variation and consolidation)	Duly made 09/08/2018	Application vary to add waste water treatment plant and to update the permit to modern conditions.

<b>Status log of the permit Part A</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Additional information received	16/10/2018 02/11/2018	Response to Schedule 5 notice dated 10/09/18 including information on flare and contingency arrangements.
Additional information received	07/01/2019	Response to Schedule 5 notice dated 04/12/18 including information on proposed phasing of operations, maintenance of pipework, biogas storage, combustion equipment, environmental management system and commissioning plan.
Variation determined EPR/BN3138IG	05/03/2019	Varied permit issued.
Application EPR/BN3138IG/V009 (variation and consolidation)	Regulation 61 Notice response received 10/10/2022.	Environment Agency initiated variation and consolidation following the Food, Drink & Milk Industries sector permit review.
Regulation 61(1) Notice – request for further information dated 31/07/2023	Received 31/08/2023	Relating to BAT3, BAT6, BAT7, BAT11, BAT12, BAT14, Containment, Production Capacity, Energy EPL, RHS Baseline, Site Plan, WT-AD BAT 15, and WT-AD BAT38.
Additional information received	08/12/2023	Updated site emission point plan.
	17/01/2024	Confirmation of cofiring of boilers with natural gas and biogas.
	29/01/2024	Updated site plan with corrected emission point locations, confirmation of proportion of biogas utilisation.
Variation determined and consolidation issued EPR/BN3138IG (Billing ref. KP3423PJ).	23/02/2024	Varied and consolidated permit issued in modern format

<b>Status log of the permit Part B: EPR/MP343ZZ</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application YP3733LE	Duly made 07/04/2006	
Additional Information Received	25/07/2006	Response date 10/08/06
Permit determined	20/12/2006	
Application EPR/MP3434ZZ/T001 (full transfer of permit EPR/ YP3733LE)	Duly made 17/09/2013	Application to transfer the permit in full to Heineken UK Limited.
Transfer determined EPR/MP3434ZZ	23/09/2013	Full transfer of permit complete.
Variation and consolidation application (EPR/MP3434ZZ/V002)	Duly made 27/01/2015	

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/BN3138IG

### Issued to

**Heineken UK Limited** (“the operator”)

whose registered office is

**3-4 Broadway Park  
South Gyle Broadway  
Edinburgh  
EH12 9JZ**

company registration number SC065527

to operate a regulated facility at

**Bulmers Cider Mills  
The Cider Mills  
Plough Lane  
Hereford  
Herefordshire  
HR4 0LE**

to the extent set out in the schedules.

The notice shall take effect from 23/02/2024.

Name	Date
Bethany Smith	23/02/2024

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/BN3138IG**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BN3138IG/V009 authorising,

**Heineken UK Limited** (“the operator”),

whose registered office is/whose principal office is

**3-4 Broadway Park  
South Gyle Broadway  
Edinburgh  
EH12 9JZ**

company registration number SC065527

to operate an installation activity at

**Bulmers Cider Mills  
The Cider Mills  
Plough Lane  
Hereford  
Herefordshire  
HR4 0LE**

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

Name	Date
Bethany Smith	23/02/2024

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”).
- 2.1.2 The activities shall be undertaken in accordance with best available techniques.
- 2.1.3 All process plant and equipment shall be commissioned, operated and maintained and shall be fully documented and recorded in accordance with the manufacturer’s recommendations.

### **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 (AR4 Boiler 1 – 3) the first monitoring measurements shall be carried out within four months of 01/01/2025 (MCP >5MW) and 01/01/2030 (MCP <5MW) 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, but including ammonia) 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.
- 3.2.4 The operator shall implement a leak detection and repair (LDAR) programme to detect and mitigate the release of volatile organic compounds, including methane from diffuse sources.

### **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;
  - (b) process monitoring specified in table S3.4.
- 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 Following the detection of an issue listed in condition 4.3.1, the operator shall review and revise the management system and implement any changes as necessary to minimise the risk of re-occurrence of the issue.

4.3.4 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.

4.3.5 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.

4.3.6 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.

- 4.3.7 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.
- 4.3.8 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

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity</b>
AR1	Section 6.8 Part A(1) (d)(ii)	Cider Production:  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 Cider production, packaging, storage and warehousing activities.  Includes fermentation from apple juice and concentrate and processing including maturation, filtration, blending and pasteurisation.  Production capacity is limited to 878 tonnes per day.
AR2	Section 5.4 Part A(1) (b) (i)	Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	From receipt of waste through to digestion and recovery of by-products (digestate). Anaerobic digestion of waste in tanks followed by burning of biogas produced from the process.
<b>Directly Associated Activity</b>			
AR3	Raw material storage and handling	Storage and handling of raw materials at the installation	From receipt of raw materials to dispatch of final product.
AR4	Steam supply	Medium Combustion plants: 2 x 11 MWth Boilers 1 x 4MWth Boiler  Boilers are fuelled on either natural gas alone or co-fired natural gas and biogas.	From receipt of fuel to release of products of combustion to air.  Biogas produced by onsite anaerobic digestion. Co-fired fuel mixture shall not exceed 7% biogas.
AR5	Emergency flare operation	D10: Incineration on land	Undertaken in relation to AR2 activity.  From the receipt of biogas produced at the on-site anaerobic digestion process to incineration with the release of combustion gases.  Use of one auxiliary flare required only during periods of breakdown or maintenance of the steam raising boilers.
AR6	Digestate storage within bioreactor	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection,	Undertaken in relation to AR2 activity.  From the generation of digestate in bioreactor to transfer off-site. No

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity</b>
		on the site where it is produced)	digestate is to be stored except within the bioreactor.
AR7	Storage and handling of solid wastes.	Storage and handling of solid wastes.	From separation of wastes from process to dispatch from installation.
AR8	Water discharges to foul sewer and controlled water.	Discharge of process water and site surface water from the installation.	From point of entry to sewer or controlled waters.
AR9	CO <sub>2</sub> recovery	Recovery of CO <sub>2</sub> from the fermentation process.	From generation of CO <sub>2</sub> to recovery, management and use.
AR10	Beer packaging	Packaging of beer on site received.	From receipt of beer to dispatch from installation.

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Regulation 61 (1) Notice – Responses to questions dated 07/06/2022	All parts	Received 10/10/2022
Regulation 61(1) Notice – request for further information dated 31/07/2023	Updated R61 response tool	Received 31/08/2023

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC12	The Operator shall confirm in writing to the Environment Agency that the Narrative BAT requirements for the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 6 were in place on or before 4 December 2023. Refer to BAT Conclusions for a full description of the BAT requirement.	23/04/2024
IC13	The operator shall review and update the H1 risk assessment at the capacity levels stated within table S1.1 of this permit. The H1 shall be submitted to the Environment Agency for review.	23/02/2025
IC14	The operator shall submit to the Environment Agency for approval a risk assessment considering the possibility of soil and groundwater contamination at the installation where the activity involves the use, production or release of a hazardous substances (as defined in Article 3 of Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures).  A stage 1-3 assessment should be completed (as detailed within the EC Commission Guidance 2014/C 136/-3) as follows;	23/02/2025



<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<p>Stage 1 – Identify hazardous substance(s) used / stored on site.</p> <p>Stage 2 – Identify if the hazardous substance(s) are capable of causing pollution. If they are capable of causing pollution, they are then termed Relevant Hazardous Substances (RHS).</p> <p>Stage 3 – Identify if pollution prevention measures &amp; drains are fit for purpose in areas where hazardous substances are used / stored.</p> <p>If the outcomes of Stage 3 identifies that pollution of soil / ground water to be possible. The operator shall produce and submit a monitoring plan to the Environment Agency for approval detailing how the substance(s) will be monitored to demonstrate no pollution. The operator shall commence monitoring of the RHS within a timescale as agreed by the Environment Agency.</p>	
IC15	<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"> <li>• Details of how the installation has or could be affected by severe weather;</li> <li>• The scale of the impact of severe weather on the operations within the installation;</li> <li>• An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation.</li> </ul> <p>The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.</p>	23/02/2025

## Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
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## 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
A4 on site plan in Schedule 7	Fermentation vent	No parameters set	No limits set	-	-	-
A5 on site plan in schedule 7	Carbon dioxide recovery plant deodoriser regeneration outlet	No parameters set	No limits set	-	-	-
A6 on site plan in schedule 7	Individual or combined fermentation vessel vents	No parameters set	No limits set	-	-	-
A7 on site plan in schedule 7	Sodium metabisulphite bulk tank vent	No parameters set	No limits set	-	-	-
A8 on site plan in schedule 7	Vent from CO <sub>2</sub> scrubber	No parameters set	No limits set	-	-	-
A9 on site plan in schedule 7	10 miscellaneous vents	No parameters set	No limits set	-	-	-
A10 on site plan in schedule 7	Dehydrator vent	No parameters set	No limits set	-	-	-
A11 on site plan in schedule 7	11 Vents	No parameters set	No limits set	-	-	-
A12 on site plan in schedule 7	Vent/pressure relief – one sterile cider buffer tank	No parameters set	No limits set	-	-	-
A13 on site plan in schedule 7	3 vents and pressure relief – 3 beer holding vessels	No parameters set	No limits set	-	-	-
A14 on site plan in schedule 7	4 vents and pressure relief – 4 sterile cider buffer tanks	No parameters set	No limits set	-	-	-
A15 on site plan in schedule 7	Vent/ pressure relief – one can line cider buffer tank	No parameters set	No limits set	-	-	-
A16 on site plan in schedule 7	Ink jet coder vent	No parameters set	No limits set	-	-	-

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>							
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	
A17 on site plan in schedule 7	Can filler extraction vent	No parameters set	No limits set	-	-	-	
A18 on site plan in schedule 7	One tank vent - bulk tanker filling	No parameters set	No limits set	-	-	-	
A19 on site plan in schedule 7	Steam raising boiler  11MWth fired on natural gas only	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>x</sub> )	200mg/m <sup>3</sup> [Note 3]	Periodic	Every three years	MCERTS BS EN 14792 [Note 3]	
		Carbon monoxide	No Limit [Note 3]	Periodic	Every three years	MCERTS BS EN 15058 [Note 3]	
	Steam raising boiler  11MWth co-fired on natural gas and biogas	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>x</sub> )	203.5mg/m <sup>3</sup> [Note 3]	Periodic	Every three years	MCERTS BS EN 14792 [Note 3]	
		Sulphur dioxide	11.9mg/m <sup>3</sup> [Note 3]	Periodic	Every three years	MCERTS BS EN 14791 [Note 3]	
		Carbon monoxide	No Limit [Note 3]	Periodic	Every three years	MCERTS BS EN 15058 [Note 3]	
	A20 on site plan in schedule 7	Steam raising boiler  11MWth fired on natural gas only	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>x</sub> )	200mg/m <sup>3</sup> [Note 3]	Periodic	Every three years	MCERTS BS EN 14792 [Note 3]
			Carbon monoxide	No Limit [Note 3]	Periodic	Every three years	MCERTS BS EN 15058 [Note 3]
		Steam raising boiler  11MWth co-fired on natural gas and biogas	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>x</sub> )	203.5mg/m <sup>3</sup> [Note 3]	Periodic	Every three years	BS EN 14792 [Note 3]
Sulphur dioxide			11.9mg/m <sup>3</sup> [Note 3]	Periodic	Every three years	MCERTS BS EN 14791 [Note 3]	
Carbon monoxide			No Limit [Note 3]	Periodic	Every three years	MCERTS BS EN 15058 [Note 3]	

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A21 on site plan in schedule 7	Steam raising boiler  4MWth fired on natural gas only	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>x</sub> )	250 mg/m <sup>3</sup> [Note 1]	Periodic	Every three years	MCERTS BS EN 14792 [Note 1]
		Carbon monoxide	No Limit [Note 1]	Periodic	Every three years	MCERTS BS EN15058 [Note 1]
	Steam raising boiler  4MWth co-fired on natural gas and biogas	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>x</sub> )	250 mg/m <sup>3</sup> [Note 1]	Periodic	Every three years	MCERTS BS EN 14792 [Note 1]
		Sulphur dioxide	14 mg/m <sup>3</sup> [Note 1]	Periodic	Every three years	MCERTS BS EN 14791 [Note 1]
		Carbon monoxide	No Limit [Note 1]	Periodic	Every three years	MCERTS BS EN15058 [Note 1]
A22 on site plan in schedule 7	Wastewater treatment plant emergency flare	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	150 mg/m <sup>3</sup>	Hourly average	Annually [Note 2]	MCERTS BS EN 14792
		Carbon monoxide	50 mg/m <sup>3</sup>	Hourly average	Annually [Note 2]	MCERTS BS EN 15058
		Total VOCs	10 mg/m <sup>3</sup>	Hourly average	Annually [Note 2]	MCERTS BS EN 12619
A23 on site plan in schedule 7	Keg line wash set tank vent	Carbon dioxide	No limits set	-	-	-
A24 on site plan in schedule 7	Evaporator condenser cooling tower	Water vapour	No limits set	-	-	-
A25 on site plan in schedule 7	Wastewater treatment plant divert tank air vent	No parameter set	No limit set	-	-	-

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A26 on site plan in schedule 7	Wastewater treatment plant balance tank – 1 vent (via carbon filter)	No parameter set	No limit set	-	-	-
A27 on site plan in schedule 7	Wastewater treatment plant balance tank – 1 pressure relief valve per bioreactor	No parameter set	No limit set	-	-	-
<p>Note 1 - Emission limit and/or monitoring requirements apply from 1 January 2030, unless otherwise advised by the Environment Agency.</p> <p>Note 2 - Monitoring to be undertaken 12 months after commissioning of the emergency flare. Following commissioning, monitoring to be undertaken in the event the emergency flare has been operational for more than 10 per cent of a year (876 hours). Record of operating hours to be submitted annually to the Environment Agency.</p> <p>Note 3 - Emission limit and/or monitoring requirements apply from 1 January 2025, unless otherwise advised by the Environment Agency.</p>						

<b>Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
W1 on site plan in schedule 7 emission to Widemarsh Brook	Cooling water originating from borehole water and uncontaminated surface water discharge	Temperature	25°C	-	Monthly	MCERTS
		Flowrate		-	Continuous reported as a daily average	MCERTS
W3 – W13 on site plan in schedule 7 emission to Widemarsh Brook	Uncontaminated surface runoff	No parameters set	No limits set	-	-	-

<b>Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. Unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
S1 – S4 on site plan in schedule 7	Emergency use only	No parameters set	No limits set	-	-	-

<b>Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. Unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
S5 on site plan in schedule 7	Wastewater treatment plant	No parameters set	No limits set	-	-	-

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Biogas in digester	Flow	Continuous	In accordance with EU weights and measures Regulations	Process monitoring to be recorded using a SCADA system where relevant.
	Methane	Continuous	None specified	Gas monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations
	Hydrogen sulphide	Continuous	None specified	---
Digesters and storage tanks	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary.
Digesters and storage tanks	Integrity checks	Weekly	Visual assessment	--
Emergency flare	Operating hours	Continuous	Recorded duration and frequency. Recording using a SCADA system or similar system	Date, time and duration of use of auxiliary flare shall be recorded.
	Quantity of gas sent to emergency flare			Quantity can be estimated from gas flow composition, heat content, ratio of assistance, velocity, purge gas flow rate, pollutant emissions.

## Schedule 4 – Reporting

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

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Point source emissions to air Parameters as required by condition 3.5.1	A22	Every 12 months	1 January
	A19, A20, A21	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
Point source emissions to water (other than sewer) Parameters as required by condition 3.5.1	W1	Quarterly	1 January, 1 April, 1 July & 1 October
Process monitoring – digester tank integrity Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 5 years from the date of commissioning or as per the manufacturer's recommendation, whichever is sooner	1 January
Process monitoring – leak detection and repair (inspection, calibration and maintenance) Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 3 years	1 January
Process monitoring – use of emergency flare Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 12 months	1 January

<b>Table S4.2: Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
Production of cider	hectolitres (hl)
Effluent treated	metres cubed (m <sup>3</sup> )
CO <sub>2</sub> recovered	tonnes (t)



<b>Table S4.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Water usage	Annually	m <sup>3</sup>
Energy usage	Annually	MWh
Waste – recovery/disposal routes	Annually	tonnes
Ammonia refrigerant consumption	Annually	kg
Emergency flare operation	Annually	hours
Food waste	Annually	tonnes
COD efficiency	Annually*	COD te/te product
*COD efficiency to be calculated on a weekly frequency, reported annually		

<b>Table S4.4 Reporting forms</b>		
<b>Parameter</b>	<b>Reporting form</b>	<b>Form version number and date</b>
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 water (other than sewer)	Emissions to Water 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
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	

<b>(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</b>	
<b>To be notified within 24 hours of detection</b>	
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>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

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

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements for the breach of permit conditions not related to limits</b>	
<b>To be notified within 24 hours of detection</b>	
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.	

<b>(d) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
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.

“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.

“Leak detection and repair (LDAR) programme” means a structured approach to reduce fugitive emissions of organic compounds by detection and subsequent repair or replacement of leaking components. Currently, sniffing (described by EN 15446) and optical gas imaging methods are available for the identification of leaks as set out in BAT 14 and section 6.6.2 of the Waste Treatment BAT Conclusions.

“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.

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

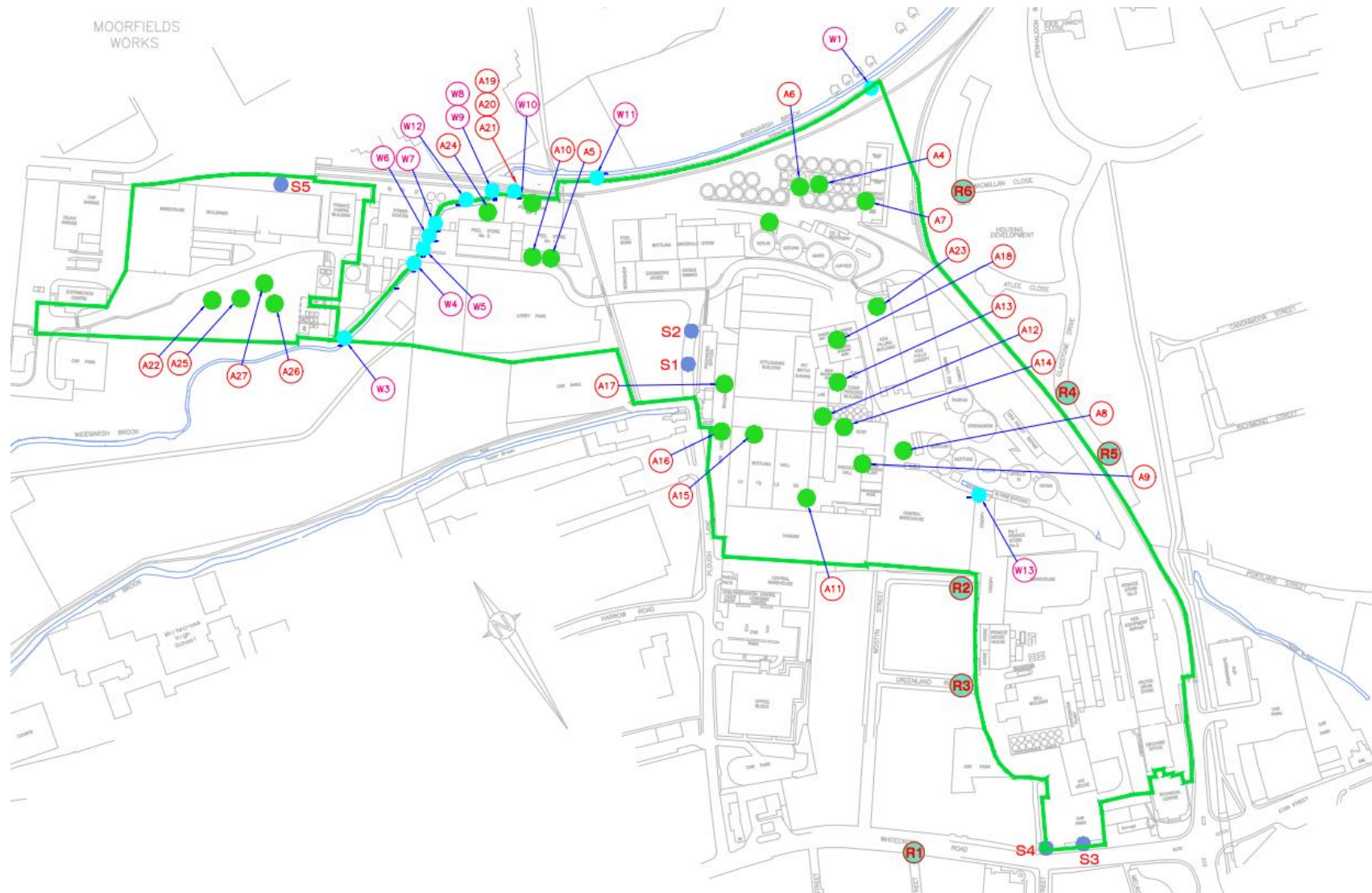
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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)

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**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.

- <sup>1</sup> 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.
- <sup>2</sup> 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.
- <sup>3</sup> 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.
- <sup>4</sup> 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/BN3138IG*

**Operator:** Heineken UK Limited

**Facility name:** *Bulmers Cider Mills*

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

Reporting of emissions to water (other than to sewer) for the period from *[DD/MM/YY]* to *[DD/MM/YY]*

<b>Emission point</b>	<b>Substance / parameter</b>	<b>Emission Limit Value</b>	<b>Reference period</b>	<b>Test method <sup>1</sup></b>	<b>Result <sup>2</sup></b>	<b>Sample dates and times <sup>3</sup></b>	<b>Uncertainty <sup>4</sup></b>
<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.

- <sup>1</sup> 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.
- <sup>2</sup> 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.
- <sup>3</sup> 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.
- <sup>4</sup> 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/BN3138IG*

Operator: Heineken UK Limited

Facility name: *Bulmers Cider Mills*

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

Reporting of water usage for the year *[YYYY]*

Water source	Water usage (m <sup>3</sup> )	Specific water usage (m <sup>3</sup> /tonne of product) <sup>2</sup>
Mains water	<i>[insert annual usage in m<sup>3</sup> where mains water is used]</i>	Not Applicable
Site borehole	<i>[insert annual usage in m<sup>3</sup> where water is used from a site borehole]</i>	Not Applicable
River abstraction	<i>[insert annual usage in m<sup>3</sup> 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 m<sup>3</sup> where applicable]</i>	Not Applicable
Total water usage	<i>[insert total annual water usage in m<sup>3</sup>]</i>	<i>[insert total water use per tonne of product produced m<sup>3</sup>/t]</i>

Operator's comments

<b>Operator's comments</b>

**Signed:**     *[Name]*

**Date:**       *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

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**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/BN3138IG*

**Operator:** Heineken UK Limited

**Facility name:** *Bulmers Cider Mills*

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

Reporting of energy usage for the year *[YYYY]*

<b>Energy source</b>	<b>Energy consumption / production (MWh)</b>	<b>Specific energy consumption (MWh/tonne of product) <sup>2</sup></b>
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 <sup>1</sup> – 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
<b>Total</b>	<i>[insert total energy use in MWh]</i>	<i>[insert total energy use per tonne of product MWh/tonne of product]</i>



## Food Waste Reporting Form

Permit number: *EPR/BN3138IG*

Operator: Heineken UK Limited

Facility name: *Bulmers Cider Mills*

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

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

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

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



<b>Land application</b>	
<b>Landfill</b>	
<b>Sewer/wastewater treatment (e.g. as COD)</b>	
<b>Other (Please specify)</b>	

**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/BN3138IG*

Operator: Heineken UK Limited

Facility name: *Bulmers Cider Mills*  
08/03/2021

Other Performance Parameters Reporting Form: version 1,

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>
Production of cider	hectolitres (hl)
Effluent treated	m <sup>3</sup>
CO <sub>2</sub> recovered	tonnes
Waste sent for recovery (specify route)	tonnes
Waste sent for recycling (specify route)	tonnes
Total product waste sent for disposal (specify route)	tonnes
Ammonia refrigerant consumption	kg
Emergency flare operation	hours
COD efficiency	COD te/te product

### Operator's comments

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**Signed:** *[Name]*

**Date:** *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

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**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.