

Permitting decisions

Bespoke permit

We have decided to grant the permit for The Cyder House operated by Aspoll Cyder Limited.

The permit number is EPR/GP3432QA.

The site is located at National Grid Reference TM 17115 65360, approximately 1km north of Manchester Debenham. The operation on site include:

- Production, processing, bottling and kegging facility producing juice, vinegar and cyder;
- Processing of vegetable raw materials producing apple juice;
- Fermentation of apple juice producing cyder
- Blending of purchased malt, red wine and white wine vinegar as well as the acetification of cyder producing cyder vinegars
- Bottling of vinegar and cyders
- Processes on site are fermentation, flash pasteurisation, filtration and cooling via refrigeration

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document provides a record of the decision making process. It:

- highlights [key issues](#) in the determination
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account
- shows how we have considered the [consultation responses](#).

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

Key issues of the decision

The application submission contains a number of supporting documents that describe the controls and operating techniques at the installation, having regard for Best Available Techniques (BAT) requirements, as specified in our guidance and to ensure compliance with the environmental permit conditions. These key controls and techniques are described in the following sections.

General Management

The installation has a bespoke Environment Management System (EMS) in place which is designed to ensure that environmental management is a high priority within the sites operations. The aims, objectives

and targets will be designed to control the environmental aspects and reduce the environmental impacts of the production/kegging/bottling process.

Odour

The installation has the potential to cause odorous emissions through various stages of the process such as processing raw materials, production of vinegar/ cyder and the effluent produced.

The applicant employs a range of controls to reduce odorous emissions such as:

- Cleaning in Place (CIP): as a food and drink site CIP is an ongoing process. Each process has a separate procedure for cleaning equipment.
- Potentially odorous material will be transferred from storage tanks via sealed pipe work.
- Waste is segregated at source and recycled or disposed of appropriately.

At this time we do not require a site specific Odour Management Plan (OMP), however the permit conditions enable the Environment Agency to require the operator to develop and implement an OMP if deemed necessary.

Noise and Vibration

The installation has the potential to cause noise emissions through various stages of the process. Potential sources of onsite noise include noise from equipment, machinery, delivery/dispatch vehicles and employees. The nearest residential receptors lie 180m of the northern site boundary.

Consideration has been given to the location of the effluent treatment plant and buildings with regards to noise and to appropriate operational measures.

The applicant employs a range of procedures and has a noise action plan to introduce further control measures to reduce noise emissions. An improvement programme has been included (IC1) to ensure the Noise Action Plan has been implemented.

At this time we do not require a site specific Noise Management Plan (NMP), however the permit conditions enable the Environment Agency to require the operator to develop and implement an NMP if deemed necessary.

Fugitive Emissions

Emissions to air and water

The installation has the potential to release fugitive emissions to air and water. The applicant has identified the sources of fugitive emissions and will ensure sufficient management and controls in place to minimise these.

- Refrigerant gases – all refrigeration units are on a service schedule to ensure optimum operation and ensure leak checks are carried out and a maintenance record is stored within the engineering in the F-Gas folder.
- Chemicals and fuels are stored in the correct containers for the material stored on hardstanding.
- The majority of the site and in all areas where the permitted process occurs are covered by hardstanding; therefore no pollutant linkage is present.
- Surface water drainage systems have oil interceptors fitted at relevant discharge points to ensure no release to the environment.

The site has a number of procedures in place to mitigate against fugitive emissions and deal with any leaks and spillages. The relevant procedures form part of the EMS.

Point Source Emissions

Emissions to air

Point source emissions to air arises from the operation of one 3.16 MW boiler fired with gas oil. A back-up boiler is used in emergencies in case of breakdown or maintenance of the primary unit, the back-up boiler has a small thermal input of 274Kw. Due to the age and/or size of the plant, they currently fall outside the scope of the Medium Combustion Plant Directive.

Point source emissions from the boiler comprise of particulates, CO₂, NO_x, and SO_x which are released to atmosphere via a 10 m stack.

The boiler stack emissions are the main point source, an Air Quality Assessment (AQA) has been carried out and air dispersion modelling provided. Air dispersion modelling enables the process contribution (PC) to be predicted at any environmental receptor that might be impacted by the plant. The PEC (the sum of the PC and background concentration) for short-term impacts screens out for all receptors, and the worst impact for long-term is only 53% of the EAL.

On the basis of the above, and the fact that the rated thermal input of the combustion plant is less than 20MW, we are satisfied that the emissions are unlikely to have any significant environmental impact and no further assessment is needed.

Assessment of conservation sites

There are no European designated nature conservation sites within 10 km of the site and no Sites of Special Scientific Interest within 2km of the site. However, there are the following designated sites are within 2km of the site Aspall Wood Ancient Woodland and Aspall Wood Local Wildlife Site.

The maximum annual-mean for NO_x PCs; maximum daily-mean NO_x PCs; annual-mean SO₂ PCs; maximum nitrogen deposition PCs; and maximum acid deposition PCs do not exceed 100% of the critical level at any of the sites and the effects can be screened out as insignificant.

Emissions to sewer, surface water and groundwater

There are a number of common techniques in place on site to reduce the emission to water mainly an onsite effluent treatment plant; drum screen to remove solids into a dolav unit; screened effluent flows into a series of balance, divert and aeration tanks; and biological sludge from the aeration tank flows through a Membrane Bioreactor (MBR). Treated effluent discharge passes through a MCERTS flowmeter with a flow proportional 24 hour composite sampler, before discharging to a surface drain and ultimately The Gulls river leading to River Deben.

The emission limits for the following sanitary determinands have been set stricter than that required by BAT due to the River Deben being dry at certain times of the year requiring applied maintenance of permitted load. These limits include Biological Oxygen Demand 10mg/l, Suspended Solids 20mg/l, Ammonia as N 3mg/l and Total Phosphorous 1mg/l.

It was also identified during permit determination that residual pesticides in the effluent discharge is a key parameter of concern.

We asked the operator to provide further information regarding this, to qualify the inputs, via Schedule 5 notice dated 11/08/2020.

Whilst we believe that the treatment technology is considered BAT, based on the site specific receiving environment, we will require the operator to undertake further assessment of the residual pesticides in the effluent discharge, and ensure that the risks are adequately mitigated.

On that basis, we have included IC2 and IC3 in the permit requiring the operator to undertake a more robust quantitative analysis of the effluent discharge and use these results to undertake a comprehensive risk assessment. The outcome of the assessment will determine if any additional measures are needed.

It is deemed as appropriate in this particular case to allow this risk assessment to be satisfied through improvement conditions as the operator has demonstrated that they are applying Best Available Techniques and the site specific risk assessment demonstrates that the overall environmental setting is comparably low risk.

In addition, we have also included IC4 to ensure the operator has a system in place, through the EMS, to ensure any new pesticides/chemicals introduced are subject to risk assessment.

Uncontaminated surface water run-off enters into the drainage system and is discharge to surface water bodies or drains. We are satisfied there are sufficient control measures in place on site to prevent the possible contamination of surface water run-off. Uncontaminated surface water run-off is discharged to a surface water drains flowing to The Gulls river and ultimately the River Deben.

Resource Efficiency and Waste Management

Raw Materials

Raw material efficiency is controlled and is measured through the monitoring of production loss and waste, with a product efficiency of 0.36 tonnes/tonnes. Apples are delivered on site and unloading direct for pressing. Liquid raw materials are primarily delivered in Intermediate Bulk Containers (IBCs) and smaller drums, some liquids are delivered to site and stored in tanks. Liquid sugar will be stored in tanks with bunded areas. Apple juice (previously pressed on site) may return to site from 3rd party storage in 1,000 litre bags in box units these are stored on hard standing with drainage to effluent treatment plant.

Waste Handling

As part of the EMS waste is appropriately handled, segregated and stored on site. Waste is segregated at source and stored in this manner on-site until collected. All hazardous materials is segregated and stored securely and contractors are responsible for the removal and disposal of their own hazardous waste. Only licensed waste carriers are permitted to remove waste from the Aspall site and a copy of their licence (authorisation) to carry and/or dispose of waste is obtained prior to any removal. .

Energy Usage

The energy consumption on site is a current site Key Performance Indicator (KPI) there are a number of common energy saving techniques that are implemented on site including:

- Lighting within the packaging and press buildings replaced with LEDs
- Implementation of motion censored lighting in the fermentation building
- Solar panels have been fitted onto the keggling building roof
- Chillers have been replaced with variable speed more efficient chillers

Refrigerant Gases

All refrigerant gases will be replaced on an "as required" basis with lower GWP gases, as they become available with similar performance characteristics and when gases require replacement owing to maintenance or leaks, these procedures are carried out in accordance with the site EMS.

Water Use

The site uses potable water which is supplied by town mains supplies, this water is used for cleaning, as an ingredient and for processing purposes.

The site currently achieves a water ratio / hl of product is approximately 2.0hl/hl (including water used as an ingredient). The water usage on site is a current site KPI there are a number of common water saving techniques that will be implemented on site including:

- Optimisation of the design of equipment/ processes on site. Such as using a dry conveyor apple handling system.
- Replacing vinegar cooling towers with adiabatic condensers, which only using water at peak ambient conditions rather than throughout the year.
- A fixed CIP system within kegging, bottling, vinegar and press which are designed to minimise water use, CIP reuses water where possible. All pumps on the system are interlocked and controlled via a programmable logic controller.

Harmful Substances

In order to reduce the use of harmful substances a number of techniques are implemented on site including: the reuse of cleaning chemicals in cleaning-in-place (CIP), the proper selection of cleaning chemicals and the use of conductivity probes to ensure optimum dosing rates.

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.
Consultation	
Consultation	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <ul style="list-style-type: none"> • Director of Public Health (Suffolk County Council) • Public Health England • Local Authority – Environmental Health (Babergh & Mid Suffolk District Council) • Local Authority – Planning (Babergh & Mid Suffolk District Council) • Food Standards Agency • Sewerage Authorities – Anglian Water • Northumbrian Water Group – Essex and Suffolk Water <p>No responses were received from:</p> <ul style="list-style-type: none"> • Foods Standards Agency <p>The comments and our responses are summarised in the consultation section.</p>
Operator	
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.
The facility	
The regulated facility	<p>We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN 2 'Defining the scope of the installation'.</p> <p>The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.</p>
The site	
Extent of the site of the	The operator has provided a plan which we consider is satisfactory, showing

Aspect considered	Decision
facility	the extent of the site of the facility. The plan is included in the permit.
Site condition report	The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.
Biodiversity, heritage, landscape and nature conservation	<p>The application is not within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <p>We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.</p> <p>We have not consulted Natural England and Natural Resources Wales on the application. The decision was taken in accordance with our guidance.</p>
Environmental risk assessment	
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p>
Operating techniques	
General operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.</p> <p>The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.</p>
Operating techniques for emissions that screen out as insignificant	<p>Emissions have been screened out as insignificant, and so we agree that the applicant's proposed techniques are BAT for the installation.</p> <p>We consider that the emission limits included in the installation permit reflect the BAT for the sector.</p>
Permit conditions	
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.
Improvement programme	<p>Based on the information on the application, we consider that we need to impose an improvement programme.</p> <p>We have imposed an improvement programme to ensure that the impact of noise and residual pesticides are minimised. This is covered in more detail in the key issues section above.</p> <p>IC5 has also been included to ensure condition 3.5.3 is met within 6 months</p>

Aspect considered	Decision
	of permit issue.
Emission limits	<p>Emission Limit Values (ELVs) or equivalent parameters or technical measures based on BAT have been set for the following substances: Total Nitrogen and Chemical Oxygen Demand. The ELV for pH has been carried over from the previous discharge consent.</p> <p>We have imposed a stricter ELV than that required by BAT/IED in respect of Biological Oxygen Demand, Suspended Solids, Ammonia as N and Total Phosphorous, see key issues.</p> <p>Improvement Programme includes IC2, IC3 & IC4 which will determine the emission limit for Total pesticides upon completion, see key issues.</p>
Monitoring	<p>We have decided that monitoring should be carried out for the parameters listed in Schedule 3 of the permit, using the methods detailed to the frequencies specified in those tables.</p> <p>The methods for monitoring are in accordance with Best Available Techniques.</p> <p>Improvement Programme IC5 will ensure the monitoring standard is met within 6 months of permit issue.</p>
Reporting	We have specified reporting in Schedule 4 of the Permit to meet requirements set out in the Food, Drink and Milk Industries BREF.
Operator competence	
Management system	<p>There is no known reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.</p> <p>The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.</p>
Relevant convictions	<p>The Case Management System has been checked to ensure that all relevant convictions have been declared.</p> <p>No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.</p>
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	<p>We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to</p>

Aspect considered	Decision
	<p>development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”</p> <p>We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.</p> <p>We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.</p>

Consultation

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section

Response received from
Babergh & Mid Suffolk District Council
Brief summary of issues raised
Babergh & Mid Suffolk District Council no relevant issues where raised.
Summary of actions taken or show how this has been covered
No further actions.

Response received from
Public Health England
Brief summary of issues raised
Boiler emissions – reassured to see air quality screening assessment evaluated on impacts on the local area for nitrogen dioxide, sulphur dioxide and carbon monoxide from the diesel boiler. Results show the predicted concentrations associated with operations are below the relevant health based air quality standards – impacts considered insignificant. No significant concerns regarding risk to health of the local population.
Summary of actions taken or show how this has been covered
The air dispersion modelling demonstrates that the PEC for short-term impacts screens out for all receptors, and the worst impact for long-term is only 53% of the EAL. On this basis and the fact that the rated thermal input of the combustion plant is less than 20MW, we are satisfied that the emissions are unlikely to have any significant environmental impact and no further assessment is needed.

Response received from
Director of Public Health
Brief summary of issues raised
Director of Public Health no relevant issues where raised.
Summary of actions taken or show how this has been covered
No further actions.

Response received from
Sewage Authorities Anglian Water
Brief summary of issues raised
Anglian Water no relevant issues where raised.
Summary of actions taken or show how this has been covered
No further actions.

Response received from
Northumbrian Water Group – Essex and Suffolk Water
Brief summary of issues raised
Northumbrian Water Group no relevant issues where raised.
Summary of actions taken or show how this has been covered
No further actions.