

Permitting decisions

Variation

We have decided to grant the variation for Caw House operated by Cawingredients Limited.

The variation number is EPR/UP3937FW/V005

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:

- Describes the main changes introduced by the variation
- highlights key issues in the determination
- summarises the decision making process in the <u>decision checklist</u> to show how all relevant factors have been taken into account
- shows how we have considered the <u>consultation responses</u>

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

Read the permitting decisions in conjunction with consolidated permit variation notice. The introductory note summarises what the variation covers.

This substantial variation is the outcome of an application made by the operator to reflect the following changes on site:

To introduce a new canning line and its ancillary equipment alongside the three existing PET bottling lines that will result in a production capacity over 4 lines of 3360 tonnes per day. This variation will also include a new finished goods storage warehouse. The installation boundary has increased in size to include an additional 5 hectares of land where the newly constructed finished goods warehouse is located. This variation will also include the inclusion of a replacement 9MW boiler to support the expansion.

Key issues of the decision

Impact of increased production capacity

The installation of the new canning line will enable the operator to produce an additional 540 tonnes per day of product (canning line: 90,000 250ml aluminium cans per hour), taking the total production capacity to 3360 tonnes per day. The operation can run 24/7, but will only do so in times of peak production. There are no planning constraints on the working hours.

Due to the efficiency measures the operator has in place; there are no proposed increased emissions to air, land or water as a result of this variation.

Air Emissions

The 4th line will increase production output by 25%, these increased production volumes increase the demand on the boiler system for the production of steam and as such, the company has upgraded from a 2MWth to a 9MW boiler to support the expansion. The new boiler is a modern design with emphasis placed on high efficiency and low NOx emission specifications. Following a detailed assessment using the H1 software tool the point source emission from the boiler stack screen out as insignificant and therefore no further detailed modelling is required. The boiler is serviced every six months for efficiency testing and emissions monitoring by the boiler manufacturers.

Fugitive emissions

All operations are in line with the best available techniques set out for the Food and Drink sector. The listed activities including the new canning line are carried out within fully enclosed buildings. This along with the BAT process equipment and the regular maintenance and servicing of the equipment will minimise the potential for fugitive emissions.

Noise from operation

There is unlikely to be any significant increased noise and vibration as a result of this variation. The canning line is fully enclosed in its own building. A noise survey was completed to establish the likelihood of potential noise and following a review of the noise levels associated with the new activities on site, it is concluded that no significant increase in noise level is expected under the current proposed working methodology and equipment. The nature of the canning production activities do not vary significantly from those already undertaken on site. Given the industrial location of the site and distance from domestic receptors the risk from noise has been deemed as unlikely to have an adverse impact.

Efficient use of raw materials, storage of raw material and finished product

The erection of a new warehouse to the northern side of the site has allowed for a storage capacity of finished goods of 10,500 tonnes. The installation boundary has increased in size to include the newly constructed finished goods warehouse.

The site uses a number of materials each year for various activities associated with the process. A full raw materials inventory has been provided and this inventory is reviewed at least annually, considering best practice environmental options, customer requirements, COSHH (Control of Substances Hazardous to Health) Regulations and cost effectiveness.

Records of raw materials and water used in activities is kept up to date to assess the efficiency or whether suitable alternatives could be used to reduce their environmental impact.

Raw materials are chosen to ensure product quality and safety is maintained. The use of chemicals is kept to a practicable minimum. The environmental significance of materials is considered before choices are made. There are therefore currently no known alternatives to the materials currently used on site that have a less significant impact on the environment.

Cawingredients Limited frequently monitors any advancement in relevant raw material formulations and process technologies. The main raw materials are product based, maintenance materials, cleaning chemicals, packaging and water treatment chemicals.

Waste minimisation

Only one additional waste stream has been created as a result of this variation. Aluminium cans that are rejected in the process will become an additional waste stream which is 100% recyclable.

Water Usage

Water Consumption will increase in line with increased production as the end beverage product is made up predominantly of water. An estimated 25% increase is anticipated. There is an existing reverse osmosis (RO) plant on site for incoming mains water for quality purposes. From this there is a 20m3/hr reject discharged to the effluent treatment plant. Measures are in place to minimise water usage in line with best available techniques; production runs are scheduled to keep the number of product changes to a minimum therefore

reducing the frequency of cleaning and subsequent water usage; water is recycled during CIP process; the final rinse is used for the pre-rinse of the following clean; water efficient spray devices are used where necessary on site and recycled condensate is used in the process for boiler feed. Water usage is monitored and targets are set within the company's ISO14001 Environmental Management System to reduce this figure.

Emissions to land, sewer, surface water and groundwater.

All drainage within the footprint of the Canning line is directed to the existing effluent treatment plant.

Assessment of the canning line on effluent treatment, which includes the additional water from the RO reject water, has shown that the existing 500m3 capacity is sufficient and therefore no increase in discharge volume is required.

As part of the surface water management system, an underground attenuation tank, of 150m3 capacity has been installed on site to manage excess surface water from the additional land and building. All surface water is directed to soakaway located at the north of the site via a rising main. In the event of extreme inclement weather conditions that meant the capacity of the attenuation tank is exceeded, surface water will be discharged to foul sewer at 9 litres per second.

Energy Efficiency

The canning plant makes use of modern, high efficiency and automated equipment. The plant uses existing raw material storage and the design of the process means that the product is taken directly from the canning line for distribution negating the need for additional movement around site. The new warehouse and distribution facility installed at the North end of site is fitted with low energy LED lighting.

The new cooling plant that has been installed as part of the 4th line (canning) is an external free cooling design utilising ambient air when conditions allow. Cawingredients have opted for the plant with long term efficiency and reduced energy consumption.

The 4th line will increase production output by 25%, however this line is still in its commissioning phase therefore not at full capacity. Cawingredients are awaiting the October/November 2018 meter readings to give initial energy increase data. However, current estimates are that the energy consumption will be proportional i.e. up to 25% increase at full operating capacity, but it is anticipated to be much less in reality as the plant and cooling systems installed make use of the latest and most efficient technology such as;

- Tunnel Pasteurizer (integrated insulation panels for reduced energy consumption, fresh water savings due to cooling tower, recuperation of heat/cooling energy).
- Permanent Magnet Drive (40% increase in efficiency, up to 30% reduced energy consumption)
- Optimized shrink tunnel chain cooling (10% energy savings, higher reliability, up to 65% of energy saved in standby mode).

In addition to this, a significant energy consumer onsite is the compressor plant which is used in the 'blowing' of plastic preforms into drinks bottles. The new Canning line does not require the use of this method and therefore no increase in compressor usage/air pressure generation is a factor.

Lighting in the new Canning facility is of LED design and office lighting has occupancy sensors to reduce usage when not required. All plant and machinery is subject to a maintenance schedule that ensures efficiency is maintained continuously.

Other considerations

Cleaning and Sanitation - The process for the manufacture of the liquid beverage and cleaning regime is the same as existing production lines.

Accident Management Plan - All existing accident and incident procedures are sufficient to manage the new production line.

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/Engagement		
Consultation substantial change installations	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.	
	The application was publicised on the GOV.UK website.	
	We consulted the following organisations:	
	LPA – Local Planning Authority Hambleton District Council	
	EH – Environmental Health Hambleton District Council	
	PHE – Public Health England	
	HSE – Health and Safety Executive	
	FSA – Food Standards Agency	
	Sewerage Authority – Yorkshire Water	
	DPH –Department of Public Health (North Yorkshire)	
	The comments and our responses are summarised in the <u>consultation</u> <u>section</u> .	
The site		
Site condition report	The site condition report has been updated to include a description of the condition of the site for the new area to the north of the current permitted area. We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED – guidance and templates (H5).	
Biodiversity, heritage, landscape and nature conservation	The application is not within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.	
	There are no SSSIs within 2km of the site and no European designated sites within 10km of the site.	
	Local Wildlife site – Ings Lane, Crakehall is within 1.41km of the site. Given the distance we consider that the application will not damage the features of this site.	
Environmental risk assessment		
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility.	

Aspect considered	Decision	
	The operator's risk assessment is satisfactory.	
	The assessment shows that, applying the conservative criteria in our guidance on environmental risk assessment all emissions may be categorised as environmentally insignificant.	
Operating techniques		
General operating techniques	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.	
	The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.	
Permit conditions		
Updating permit conditions during consolidation	We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit(s).	
Emission limits	No emission limits have been added, amended or deleted as a result of this variation.	
Monitoring	A1 - has been included in Table S3.1 for the gas fired boiler for products of combustion to be monitoring on an annual basis. No limits have been set. L1 - Monitoring has not changed as a result of this variation.	
	S1 - Monitoring has not changed as a result of this variation.	
	The monitoring standards and methods have been updated to the latest BS versions	
Reporting	We have specified reporting in the permit.	
	Additional reporting for emissions to air form the boiler have been included as a result of this variation	
Operator competence		
Management system	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.	
	The Installation has an Environmental Management System (EMS) accredited to ISO 14001.	
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared.	
	No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.	
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		

Aspect considered	Decision
Section 108 Deregulation Act 2015 – Growth duty	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.
	Paragraph 1.3 of the guidance says:
	"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 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."
	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.
	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.

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

Response received from Public Health England on the 19/10/2018

Brief summary of issues raised

Acknowledgement that noise from the canning line would be concentrated to the east and west away from residential properties to the south. Noted that a noise impact assessment will be completed following the installation of the machinery.

Summary of actions taken or show how this has been covered

Noise and vibration are controlled by conditions within the permit. This is discussed further in the 'key issues' section of this document. Cawingredients have proposed a comprehensive noise assessment will be completed following the installation of the machinery. The noise management plan will be updated once this has been completed.