Permitting Decisions- Variation

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

The variation number is **EPR/UP3937FW/V008**.

The permit was issued on 17/10/2025

The variation is for:

- A new production line (line 6) which will increase production volumes from 4,090 tonnes a day to 5,160 tonnes per day (1,070 increase).
- A replacement boiler to increase thermal input capacity from 5.56MWth to 9.17MWth. In EPR/UP3937FW/V007, the existing boiler (boiler 1) was incorrectly permitted for 9MWth. However, since in this variation the operator has confirmed that the boiler being replaced has a rated thermal input of 5.56MWth but was assessed during V007 assuming it was 9MWth, the new thermal input of 9MWth is already permitted and no further assessment is required. An increase of 0.17MWth was determined to be a low risk increase.
- The installation of an additional Reverse Osmosis (RO) plant for the treatment of wastewater for re-use.

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 summarises the decision-making process to show how the main relevant factors have been taken into account. We have assessed the aspects that are changing as part of this variation, we have not revisited any other sections of the permit.

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

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

Key issues of the decision

Emissions to air

The Operator used the Environment Agency's H1 methodology to assess the releases from the proposed new boiler on local air quality in the context of applicable air quality standards and accepted environmental benchmarks for conservation sites.

The H1 methodology uses a concept of "process contribution (PC)", which is the estimated concentration of emitted substances after dispersion into the receiving environmental media at the point where the magnitude of the concentration is greatest. The H1 guidance provides a simple method of calculating PC primarily for screening purposes and for estimating process contributions where environmental consequences are relatively low. It is based on using dispersion factors. These factors assume worst case dispersion conditions with no allowance made for thermal or momentum plume rise and so the process contributions calculated are likely to be an overestimate of the actual maximum concentrations. More accurate calculation of process contributions can be achieved by mathematical dispersion models.

Once short-term and long-term PCs have been calculated, they are compared with Environmental Standards (ES), for example, Ambient Air Directive limit values, or UK Environmental Assessment Levels (EALs), referred to as "benchmarks" in the H1 Guidance. PCs are considered insignificant if:

- the short term PC is less than 10% of the short term environmental quality standard; and
- the long term PC is less than 1% of the long term environmental quality standard.

Where an emission cannot be screened out as insignificant at the first stage, it does not mean it will necessarily be significant. For pollutants that do not screen out as insignificant the exceedances of the relevant ES are assessed by considering the PEC (Predicted Environmental Concentration) which takes account of the background pollutant concentrations. We consider the environmental risk not to be significant where the following criteria are met:

- the short term PC is less than 20% of the short term environmental standard minus twice the long term background concentration; and
- the long term PEC is less than 70% of the long term environmental standard.

The emission were screened out as insignificant, with the exception of ecological NOx. However, the only ecological receptor within our screening distance is a local wildlife site and the process contribution is less than 100% of the environmental quality standard and as such can be deemed insignificant.

We determine the overall risk of emissions to air under normal operations is low. Furthermore, the environment permit for this facility already permits the use of a 9MWth rated thermal input boiler.

Containment

While no new raw materials will be used, there will be an increase to some of the incoming raw materials and storage vessels. There are three new tanks to contain Liquid CO_2, Hydrogenated Vegetable Oil (HVO) and Reused water.

The Liquid CO_2 is contained in a tank made from carbon steel with a capacity of 51200 litres, located in the Service Yard. The tank is not bunded as liquid CO_2 would vaporise if it leaked and therefore bunding is not required. Any tank overfill is managed by the supplier.

The HVO is contained in a 5000litre capacity self-bunded HDPE tank located in the Northern Warehouse. The tank has electronic equipment to detect the level and is calibrated annually.

Reused water is held in a 225000litre welded stainless steel tank within the Service Yard. This tank is not bunded as it is drained to the Effluent Treatment Plant (ETP) via drains.

The factory floor acts as a large bund as any spills go to drain which lead to the ETP. Spill kits are positioned across the entire site in the areas where a spill is more likely to occur, e.g. a chemical spill kit next to the battery charging area or general spill kit in the external yards in case of ingredient spill or chemical spill kit in the proximity of any areas that chemicals are stored.

Discharge to water

There is an on-site Effluent Treatment Plant (ETP), designed to treat effluent produced from:

- Cleaning In Place (CIP) equipment on all six production lines in the factory
- Water from the RO Plants

Process effluent from the RO plants is added to the rest of the clean effluent which then passes through the monitoring point and is tested weekly for volume, temperature, pH, Total Suspended Solids, Ammonia and BoD before the L1 source emission point to soakaway. There will be no change to emissions of

water due to the addition of processing line 6 as the volume of effluent discharged will reduce after treatment in the RO plants.

Best Available Techniques (BAT) Assessment

A BAT assessment has been provided justifying that BAT has been applied in relation to the changes proposed as a result of this variation application. This was reviewed against BAT conclusions for the Food, Drink and Milk Industries published on 4th December 2019 in the official journal of the European Union.

Noise and Vibration

A qualitive noise screening assessment was carried out for the changes proposed by this application. The evaluation indicated that a Noise Impact Assessment (NIA) and Noise Management Plan (NMP) are not required and that the risk is negligible.

The main potential sources of noise and vibration regarding this variation are from the new replacement boiler and new production line. Additional sources could originate from new ancillary equipment such as pumps, motors and compressors. Potential audible noise could be transmitted through the air medium to the surrounding area. An environmental noise survey was completed which established ‘no adverse impact’ on the current noise levels to the surrounding residential receptors. Noise is expected during the installation of the equipment, but a new packaging storage warehouse has been built alongside the soakaway lagoon and as part of the planning application for this, acoustic screens have been installed around the dock area to ensure noise is minimised in the areas designated for vehicular movement.

We determine the overall risk of noise and vibration under normal operations is low.

Decision considerations

Confidential information

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

Consultation

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

We consulted the local authority.

The comments and our responses are summarised in the consultation responses section.

The application was publicised on the GOV.UK website.

We consulted the following organisations in line with Environmental permits: when and how we consult:

UK Health Security Agency

Local Authority

Health and Safety Executive

No responses were received

The comments and our responses are summarised in the consultation responses section.

Nature conservation, landscape, heritage and protected species and habitat designations

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is not within our screening distances for these designations.

Environmental risk

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator’s risk assessment is satisfactory.

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.

Fire prevention plan

We haven't requested a Fire Prevention Plan at this time, but we will request one in the future if we consider the site poses a risk of fire.

Emission limits

No emission limits have been added, amended or deleted as a result of this variation as there have been no change to emissions as a result of this variation.

Monitoring

Monitoring has not changed as a result of this variation.

Management system

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

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 variation.

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 Responses

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

Responses from organisations listed in the consultation section

Response received from UK Health Security Agency

Brief summary of issues raised: No objections raised.

Summary of actions taken: No actions required.

Response received from Local Authority

Brief summary of issues raised: No objections raised.

Summary of actions taken: No actions required.