Permitting Decisions – Substantial Variation

We have decided to grant the variation for Magna Park operated by A.G. Barr P.L.C.

The variation number is EPR/XP3637ZH/V007.

The permit was issued on 10/04/2026.

The variation is for:

- Increase in site's overall production from 1000 tonnes per day to 1450 tonnes per day.
- Extension of the site's boundary.
- Installation of one heat pump.
- Installation of Effluent Treatment Plant (ETP).
- Addition of waste activity (Section 5.4) in place of AR5.
- Addition of surface water interceptor and change of drainage route for site's surface water only.
- Installation of a barrel handling plant.
- Installation of six waste compactors.
- Administrative change to emission points A1 and A2, currently listed as one point source emission, to two separate emission points listed in Table S3.1.

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 considerations section to show how the main relevant factors have been taken into account

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

Installation of ETP:

This variation introduces an ETP to the installation. Coupled with an increase in production capacity, the site will now fall under Part A(1) of Section 5.4(a)(ii), the disposal of non-hazardous waste exceeding 50 tonnes per day involving physico-chemical treatment. Adding this activity removes the Directly Associated Activity (DAA) AR5 from the permit.

There will be no change to the emission point to sewer location, trade effluent discharge consent or chemicals used in the process of pH dosing. The new ETP will change the drainage system layout and automate the process of pH dosing from the current manual way. A Supervisory Control and Data Acquisition (SCADA) system will control the chemical dosing, which will use a combination of an acid and base to correct the pH of site effluent (50% sulphuric acid the acid and 30% sodium hydroxide the base). The system will be alarmed to monitor suitable level control and any discharge to sewer will automatically stop if effluent is found to be out with the site's discharge consent limits. As the site requires high-quality water to operate, the effluent water cannot be re-used. Currently the water used on-site is generated through a reverse-osmosis (RO) system.

New holding tanks will be installed, with disposal of the original tank too. Adequate secondary containment, leak detection and impermeability will be in place, along with regular inspection and servicing. Dosing of chemicals will be undertaken in the primary tank, with the secondary tank used for overflow, backup or an intercept tank. Effluent from the secondary tank cannot be directly discharged to sewer and must be sent to the primary effluent holding tank for pH correction.

Both tanks have been adequately sized to account for the expected increase in effluent generation as a result of the increase in site production capacity and will be agitated and aerated to prevent solid settling. Both the acid and base dosing tanks will be constructed in accordance with BS EN 12573: 2000 and be vented at the top, single-skinned, and insulated if necessary.

The primary and secondary effluent holding tanks will be situated in a suitably bunded area while the chemical dosing tanks will be situated in another suitably bunded area. All bunds will be designed in accordance with HSE Secondary Containment Guidance and CIRIA 736 Containment Systems for the prevention of pollution and bund lining will be suitable to contain effluent and dosing chemicals. Spillage detection will be installed on both bunds through level float systems which will activate an alarm within the main site building if breached, it will be ensured that an appropriate breach level is set which considers any

rainwater which may enter the bunds. Each bund will be installed with a manually operated pump to allow for rainwater removal which will feed to the effluent holding tanks. There will be no penetrations to any bund to maintain bund integrity.

Best Available Techniques (BAT):

The operator submitted an updated assessment of BAT Conclusions for Food, Drink and Milk Industries which apply to the variation. Also submitted were BAT assessments based on the Waste Treatment BATc/BREF, which we will not consider for this variation, as the site does not operate any Anaerobic Digestion (AD) plants on-site.

BAT	Indicative BAT	Key measures proposed
1	Environmental management system (EMS)	The installation currently operates an EMS accredited to ISO14001 standard which will be extended to include all new plant. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 1.
2	EMS – inventory of inputs & outputs to increase resource efficiency and reduce emissions.	The operator has provided information to support compliance with BATc 2. This variation will increase water consumption to 372,000m^3. Two additional water tanks will be installed to account for this increase. An updated water balance will be made available to the EA once all processes have been completed for this variation. Inventories of waste gas, wastewater, raw materials and energy streams have been provided by the operator which we have assessed. The information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.
3	Emissions to water – monitor key process parameters	The operator has provided information to support compliance with BATc 3. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 3. The operator submitted a proposed monitoring programme for water emissions from the site.
4	Monitor emissions to water	The operator has provided information to support compliance with BATc 4. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 4. The operator currently monitors the effluent to the frequency given under BATc 4 and in line with the current effluent

		discharge consent. There is no direct discharge of water to a waterbody to consider for this site.
5	Monitor channelled emissions to air	A minor administrative change to emission points A1 and A2 apply to this variation, therefore the current permitted monitoring provisions apply. A heat pump will be added to the site in this variation, but no emissions to air are expected from this. We are therefore satisfied that BATc 5 is demonstrated satisfactorily.
6	Energy efficiency	The operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 6. • A heat pump system will be installed to improve energy efficiency and reduce the site's carbon emissions. • The use of automated control systems; • Energy efficient motors; • Variable speed drives; • The integration of heat recovery units into pieces of new processing equipment; and • The use of established and widely implemented quality control procedures and work instructions aimed at the minimisation of waste production, with attendant energy savings.
7	Water and wastewater minimisation	The operator has provided information to support compliance with BATc 7. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 7. The operator is using the following techniques: • Cleaning in place (CIP) chemicals are recovered for reuse; • Physical removal of dirt by brushes/wipes ahead of any water based cleaning; • The majority of cleaning is carried out using low pressure foam cleaning; • CIP is reviewed to optimise water use; and • CIP matrix in place to determine cleaning process for products to minimise water use and remove unnecessary chemical storage.
8	Use of harmful substances	The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8. The exact quantities of effluent dosing chemicals required to adequately correct the pH of effluent will be calculated prior to

		chemicals being dosed. The site will use the following techniques to minimise the use of harmful substances. • CIP chemicals are recovered for reuse; • Physical removal of dirt by brushes/wipes ahead of any water based cleaning; • The majority of cleaning is carried out using low pressure foam cleaning; • CIP is reviewed to optimise water use; and • CIP matrix in place to determine cleaning process for products to minimise water use and remove unnecessary chemical storage.
9	Use of refrigerants	BATc 9 sets out the use of refrigerants, detailing their ozone depletion and low global warming potential. The addition of a heat pump in this variation will introduce the utilisation of ammonia (R717) and monoethylene glycol, with monopropylene glycol being used in chilled raw material storage. All 3 have extremely low or zero global warming and ozone depletion potentials, therefore, there should be negligible emissions of ozone-depleting substances and of substances with a high global warming potential as a result of the proposed variation.
10	Resource efficiency	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 10. The operator is using the following techniques: • Chilled storage and just-in-time deliveries; • Majority of ingredients stored aseptically; • Any increased yields are packaged rather than wasted; • If plant breakdown occurs. Ingredients are tested and used; • Equipment is maintained and products are monitored to prevent waste; • Any finished goods which are rejected are crushed to recover packaging wastes for recycling; and • Food wastes are sent to effluent.
11	Emissions to water – wastewater buffer storage	The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 11. Process effluent is subject to automated pH chemical dosing via a SCADA system. The new ETP will cope with an increased production capacity with this variation.

12	Emissions to water - treatment	The operator has provided information to support compliance with BATc 12. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 12. The installation does not discharge directly to a waterbody and so, no BAT-AELs given in Table 1 of the FDM BATc document are applicable. pH correction will be undertaken for the installation to remain compliant with their trade effluent consent.
13	Noise – management plan (NMP)	We are satisfied that BATc 13 is not applicable to this Installation. A noise management plan is only required where noise nuisance at sensitive receptors is expected or has been substantiated. There have been zero complaints of noise for this site. Furthermore, no noise nuisances are expected at sensitive receptors, in relation to this variation. Therefore, an NMP is not a requirement for this site.
14	Noise minimisation	The operator has provided a noise management plan to support compliance with BATc 14. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 14.
15	Odour – management plan (OMP)	The operator has not provided an odour management plan, which we agree is not required. No new activities will increase the risk of odour nuisances, as all activities will be enclosed. We are therefore satisfied that the operator has demonstrated compliance with BATc 15.
Soft Drinks and Nectar/Juice Made from Processed Fruit and Vegetables BAT		
33	Energy Efficiency	The operator has provided information to support compliance with BATc 33. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 33. • A heat pump system will be installed to improve energy efficiency and reduce the site's carbon emissions. • The use of automated control systems; • Energy efficient motors; • Variable speed drives; • The integration of heat recovery units into pieces of new processing equipment; and • The use of established and widely implemented quality control procedures and work instructions aimed at the minimisation of waste production, with attendant energy savings.

<table>
<tr><th colspan="3">Environmental Performance Levels (EPL)</th></tr>
<tr><td>EPL</td><td></td><td>EPL for energy consumption for the soft drinks and nectar/juice made from processed fruit and vegetable sector fall between 0.01 – 0.035 MWh/hl of products (yearly average).

The site demonstrates the below level of energy consumption for the installation after this variation. We are therefore satisfied that the operator has demonstrated compliance with this EPL.

<table>
<tr><th>Maximum Quantity of Energy Consumed (MWh)</th><th>Expected Beverage Production per annum (hl)</th><th>EPL (MWh/hl)</th><th>Installation Assessment (MWh/hl)</th></tr>
<tr><td>24,900</td><td>3,872,000</td><td>0.01 – 0.035</td><td>0.006</td></tr>
</table></td></tr>
<tr><td>EPL</td><td></td><td>EPL for specific waste water discharge for the soft drinks and nectar/juice made from processed fruit and vegetable sector fall between 0.08 – 0.20 m^3/hl of products (yearly average).

The site demonstrates the below level of wastewater discharge for the installation after this variation. We are therefore satisfied that the operator has demonstrated compliance with this EPL.

<table>
<tr><th>Maximum Effluent Discharge per annum (m^3)</th><th>Expected Beverage Production per annum (hl)</th><th>EPL (m^3/hl)</th><th>Installation Assessment (m^3/hl)</th></tr>
<tr><td>372,000</td><td>3,872,000</td><td>0.08 – 0.20</td><td>0.096</td></tr>
</table></td></tr>
</table>

Heat Pump:

One air source closed loop reversible heat pump (ammonia-based) is to be installed, to deliver hot and chilled water to production processes. As a result, some chillers will become backup sources of chilling, and the two 2 MWth boilers on-site will have reduced operating hours. The heat pump will be housed in the new Energy Centre, built in the site boundary's extended area.

The heat pump has been added as a DAA under AR7, in Table S1.1. Although no emissions will be anticipated from the heat pump, it has also been added to emission point source Table S3.1. The following details the assessment of the heat pump as part of this variation:

Odour	
Ammonia leak detection system and monitoring in place with adequate ventilation to control potential leaks.	The heat pump will be located in a dedicated ammonia plant room within the energy centre, this room will be categorised as ATEX Zone 2 NE due to the use of flammable refrigerant and will feature mechanical ventilation, operating at 4 air changes per hour in normal conditions and 30 air changes per hour should ammonia be detected. Gas detection sensors will also be fitted to this room; shutting down the plant, activating extraction, isolating power and alerting site personnel via audible and visual alarms should ammonia be detected. All ammonia circuit components will be compliant with BS EN 378 and Pressure Equipment Directive (PED) requirements. Relief valves, rupture discs, and pressure monitoring systems will be installed at appropriate locations, with discharge routed to vents or sealed containment systems. The ammonia system design was subject to third-party review and validated through a detailed HAZOP/HAZCON study.
Noise and vibration	
Primarily low frequency noise from ancillary equipment such as pumps, motors and compressors. Potential audible noise could be transmitted through the air medium to the surrounding area.	A 3rd party qualitive noise impact and screening assessment was carried out for the changes proposed by the application, both during the construction and operational phase. The evaluation concluded that the overall noise impact at all existing sensitive receptors is considered to be ‘low’ during both the day-time and night-time period.
Containment	
Expect CIRIA standards and details of the containment construction, volume, monitoring, buffer capacity and emergency clean-up such as spill-kits or tankering off-site if required. CIRIA compliant containment in place such as fully cladded (110% buffer storage capacity), insulation, covered ports and a closed lid all to mitigate against heat loss.	The energy centre will sit on a reinforced concrete base which includes drainage provisions for spill containment. Storage of ammonia and monoethylene glycol in the energy centre, will be fully enclosed and located as far away as possible from sensitive receptors. Monoethylene glycol will be stored in an adequately bunded IBC. The bunding will: ▪ Completely surround the stored materials; ▪ Be impervious and resistant to the liquids in storage; and ▪ Be capable of holding 110% of the capacity of the largest storage container, or 25% of the total volume held.

Improvement Conditions:

The original permit was issued with 3 improvement conditions. IC1 was completed before V005 was issued. After consultation with the area team, both IC2 and IC3 remain incomplete, and therefore stay in the permit.

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC2	The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 4 December 2023. The report shall include, but not be limited to, the following: 1) Methodology for achieving BAT 2) Associated targets /timelines for reaching compliance by 4 December 2023. 3) Associated targets/timelines, if applicable, for reaching compliance by 4 December 2023. The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 11. Refer to BAT Conclusions for a full description of the BAT requirement.	04/12/2023
IC3	The Operator shall undertake a survey of the primary, secondary and tertiary containment at the site and review measures against relevant standard including: • CIRIA Containment systems for the prevention of pollution (C736) – Secondary, tertiary and other measures for industrial and commercial premises, • EEMUA 159 - Above ground flat bottomed storage tanks The operator shall submit a written report to the Environment Agency approval which outlines the results of the survey and the review of standard and provide details of: • current containment measures • any deficiencies identified in comparison to relevant standards, • improvements proposed • time scale for implementation of improvements. The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency.	04/12/2023

Production Capacity:

Application for this variation stated a proposed increase of 45% to the site's production capacity. This has been clarified with the operator, and the capacity limit now stands at 1450 tonnes per day.

MCPD Conditions:

Despite the previous permit variation (V006) implementing the requirements of the Medium Combustion Plant Directive (MCPD), some conditions were not included. These have now been added to the permit under this variation.

Administrative change of emission points A1 and A2:

The current permit states the two 2 MWth natural gas fuelled boilers share a stack and therefore are listed as one point source (A1). However, this is incorrect as each boiler has its own associated emission point.

As no change in operating hours, fuel type or location has been implemented by this variation, an administrative change only has been undertaken to rectify the previously erroneous emission point. Point source emissions A1 and A2 have now been separated in Table S3.1.

Site Plan and Boundary:

An updated site plan has been submitted and added to the permit, displaying all emission points and effluent discharge points, detailing the Energy Centre which houses the Heat Pump.

An extension to the site boundary was included with this application. Internal consultation with Groundwater Contaminated Land (GWCL) concluded this variation application to be low risk and had no concerns regarding the proposed installation.

Decision considerations

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.

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.

No external consultation was necessary for this application.

The regulated facility

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 RGN2

‘Defining the scope of the installation’ and Appendix 1 of RGN 2 ‘Interpretation of Schedule 1’.

The operator has provided the grid reference for the emission points from the medium combustion plants.

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.

The site

The operator has provided a plan which we consider to be satisfactory.

These show the extent of the site of the facility including the discharge points.

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.

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 operator has provided information to support compliance with the BAT reference document. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

Operating techniques for emissions that screen out as insignificant

Emissions of oxides of nitrogen, carbon monoxide, ammonia and emissions to sewer (chloride) have been screened out as insignificant, and so we agree that the applicant's proposed techniques are Best Available Techniques (BAT) for the installation.

We consider that the emission limits included in the installation permit reflect the BAT for the sector.

National Air Pollution Control Programme

We have considered the National Air Pollution Control Programme as required by the National Emissions Ceilings Regulations 2018. By setting emission limit values in line with technical guidance we are minimising emissions to air. This will aid the delivery of national air quality targets. We do not consider that we need to include any additional conditions in this permit.

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.

Improvement programme

The original permit stated improvement conditions. IC1 has been completed, but the remaining IC2 and IC3 have not, therefore remain in place in this permit variation.

Emission limits

No emission limits have been added, amended or deleted as a result of this variation. There are no changes to any emission points sources in this variation.

Monitoring

Monitoring has not changed as a result of this variation.

Reporting

Reporting 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.

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

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.