

Review of an Environmental Permit for an Installation subject to Chapter II of the Industrial Emissions Directive under the Environmental Permitting (England & Wales) Regulations 2016 (as amended)

Decision document recording our decision-making process following review of a permit

The Permit number is: EPR/RP3430BH
The Operator is: Refresco Beverages UK Limited
The Installation is: Express Park
This Variation Notice number is: EPR/RP3430BH/V008

What this document is about

Article 21(3) of the Industrial Emissions Directive (IED) requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication by the European Commission of updated decisions on best available techniques (BAT) Conclusions.

We have reviewed the permit for this installation against the BAT Conclusions for the Food, Drink and Milk Industries published on 4th December 2019 in the Official Journal of the European Union. In this decision document, we set out the reasoning for the consolidated variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the Operator in the operation and control of the plant and activities of the installation. It is our record of our decision-making process and shows how we have taken into account all relevant factors in reaching our position

As well as considering the review of the operating techniques used by the Operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

The introduction of new template conditions makes the Permit consistent with our current general approach and with other permits issued to Installations in this sector. Although the wording of some conditions has changed, while others have been deleted because of the new regulatory approach, it does not reduce the level of environmental protection achieved by the Permit in any way. In this document, we therefore address only our determination of substantive issues relating to the new BAT Conclusions.

We try to explain our decision as accurately, comprehensively and plainly as possible. Achieving all three objectives is not always easy, and we would welcome any feedback as to how we might improve our decision documents in future.

How this document is structured

1. Our decision
2. How we reached our decision
3. The legal framework
4. Annex 1 – Review of operating techniques within the Installation against BAT Conclusions.
5. Annex 2 – Review and assessment of changes that are not part of the BAT Conclusions derived permit review
6. Annex 3 – Improvement Conditions

1 Our decision

We have decided to issue the Variation Notice to the Operator. This will allow the Operator to continue to operate the Installation, subject to the conditions in the Consolidated Variation Notice that updates the whole permit.

We consider that, in reaching our decision, we have taken into account all relevant considerations and legal requirements and that the varied permit will ensure that a high level of protection is provided for the environment and human health.

The Consolidated Variation Notice contains many conditions taken from our standard Environmental Permit template including the relevant annexes. We developed these conditions in consultation with industry, having regard to the legal requirements of the Environmental Permitting Regulations and other relevant legislation. This document does not therefore include an explanation for these standard conditions. Where they are included in the Notice, we have considered the techniques identified by the operator for the operation of their installation, and have accepted that the details are sufficient and satisfactory to make those standard conditions appropriate. This document does, however, provide an explanation of our use of “tailor-made” or installation-specific conditions, or where our Permit template provides two or more options.

2 How we reached our decision

2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under Regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 22/06/2021 requiring the Operator to provide information to demonstrate where the operation of their installation currently meets, or how it will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

The Notice required that where the revised standards are not currently met, the operator should provide information that:

- describes the techniques that will be implemented before 4 December 2023, which will then ensure that operations meet the revised standards, or
- justifies why standards will not be met by 4 December 2023, and confirmation of the date when the operation of those processes will cease within the Installation or an explanation of why the revised BAT standards are not applicable to those processes, or
- justifies why an alternative technique will achieve the same level of environmental protection equivalent to the revised BAT standards described in the BAT Conclusions.

Where the Operator proposed that they were not intending to meet a BAT standard that also included a BAT Associated Emission Level (BAT-AEL) described in the BAT Conclusions Document, the Regulation 61 Notice required that the Operator make a formal request for derogation from compliance with that BAT-AEL (as provisioned by Article 15(4) of IED). In this circumstance, the Notice identified that any such request for derogation must be supported and justified by sufficient technical and commercial information that would enable us to determine acceptability of the derogation request.

The Regulation 61 Notice response from the Operator was received on 01/10/2021.

We considered it was in the correct form and contained sufficient information for us to begin our determination of the permit review, but not that it necessarily contained all the information we would need to complete that determination.

The Operator made no claim for commercial confidentiality. We have not received any information in relation to the Regulation 61 Notice response that appears to be confidential in relation to any party.

2.2 Review of our own information in respect to the capability of the Installation to meet revised standards included in the BAT Conclusions document

Based on our records and previous experience in the regulation of the installation we consider that the Operator will be able to comply with the techniques and standards described in the BAT Conclusions other than for those techniques and requirements described in BAT Conclusion 6(a) The operator does not currently comply with the requirements of BATc 9. In relation to this/these BAT Conclusion(s), the operator has committed compliance by 4 December 2023. We have therefore included Improvement Conditions IC26 and IC27 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered before 4 December 2023.

2.3 Requests for further information during determination

Although we were able to consider the Regulation 61 Notice response generally satisfactory at receipt, we did in fact need more information in order to complete our permit review assessment, and issued a further information request on 20/11/2023 concerning BATcs 5, 9, 11, water discharges, air emission points, boilers fuel, containment, effluent treatment plant, and site plan. A copy of the further information request was placed on our public register.

3 The legal framework

The Consolidated Variation Notice will be issued under Regulations 18 and 20 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the IED;
- subject to aspects of other relevant legislation which also have to be addressed.

We consider that, in issuing the Consolidated Variation Notice, it will ensure that the operation of the Installation complies with all relevant legal requirements and that a high level of protection will be delivered for the environment and human health.

We explain how we have addressed specific statutory requirements more fully in the rest of this document.

Annex 1: decision checklist regarding relevant BAT Conclusions

BAT Conclusions for the Food, Drink and Milk Industries, were published by the European Commission on 4 December 2019.

There are 37 BAT Conclusions.

BAT 1 – 15 are General BAT Conclusions (Narrative BAT) applicable to all relevant Food, Drink and Milk Installations in scope.

BAT 16 – 37 are sector-specific BAT Conclusions, including Best Available Techniques Associated Emissions Levels (BAT-AELs) and Associated Environmental Performance Levels (BAT-AEPLs):

BAT 16 & 17	BAT Conclusions for Animal Feed
BAT 18 – 20	BAT Conclusions for Brewing
BAT 21 – 23	BAT Conclusions for Dairies
BAT 24	BAT Conclusions for Ethanol Production
BAT 25 & 26	BAT Conclusions for Fish and Shellfish Processing
BAT 27	BAT Conclusions for Fruit and Vegetable Processing
BAT 28	BAT Conclusions for Grain Milling
BAT 29	BAT Conclusions for Meat Processing
BAT 30 – 32	BAT Conclusions for Oilseed Processing and Vegetable Oil Refining
BAT 33	BAT Conclusions for Soft Drinks and Nectar/Fruit Juice Processed from Fruit and Vegetables
BAT 34	BAT Conclusions for Starch Production
BAT 35 – 37	BAT Conclusions for Sugar Manufacturing

This annex provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This annex should be read in conjunction with the Consolidated Variation Notice.

The overall status of compliance with the BAT conclusion is indicated in the table as:

NA – Not Applicable

CC – Currently Compliant

FC – Compliant in the future (within 4 years of publication of BAT Conclusions)

NC – Not Compliant

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
GENERAL BAT CONCLUSIONS (BAT 1-15)			
1	<p>Environmental Management System - Improve overall environmental performance.</p> <p>Implement an EMS that incorporates all the features as described within BATc 1.</p>	CC	<p>The Operator has provided information to support compliance with BATc 1. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 1.</p> <p>The operator has an EMS externally accredited to the ISO14001 standard.</p>
2	<p>EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.</p> <p>Establish, maintain and regularly review (including when a significant change occurs) an inventory of water, energy and raw materials consumption as well as of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the features as detailed within the BATCs.</p>	CC	<p>The Operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.</p> <p>The Operator declared they are using:</p> <ul style="list-style-type: none"> • A simplified process flow diagram to identify emission points • Mass-balance to monitor water usage and waste water generation • Air monitoring points to measure the waste gases characteristics including flowrate, particulates (PM), oxides of nitrogen (NO₂), carbon monoxide (CO), carbon dioxide (CO₂), and sulphur dioxide (SO₂) • Monitoring program implemented and monitored daily for the overall consumption of raw materials waste generation, and utilities in order to identify efficiency opportunities.
3	<p>Monitoring key process parameters at key locations for emissions to water.</p> <p>For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (e.g. continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. at the</p>	CC	<p>The operator has provided information to support compliance with BATc 3. We have assessed the information provided and we are</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).		<p>satisfied that the operator has demonstrated compliance with BATc 3.</p> <p>The Operator declared they are monitoring biochemical oxygen demand (BOD), chemical oxygen demand (COD), suspended solids (SS), temperature, flow, and pH in the waste water prior to discharge to sewer.</p>
4	<p>Monitoring emissions to water to the required frequencies and standards. BAT is to monitor emissions to water with at least the frequency given [refer to BAT 4 table in BATc] and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.</p>	NA	<p>We are satisfied that BATc 4 is not applicable to this installation.</p> <p>The Operator declared that monitoring of process effluent is carried out prior to it being discharged to sewer for further treatment therefore, BATc4 is not applicable</p> <p>Discharges to water consist only of run-off, uncontaminated water in relation to which flow is measured and weekly samples are taken to detect potential contamination.</p>
5	<p>Monitoring channelled emissions to air to the required frequencies and standards. BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.</p>	NA	<p>We are satisfied that BATc 5 is not applicable to this installation.</p> <p>Because the site produces bottled drinks, there are no process associated dust emission points to be monitored, thus BATc 5 is not applicable.</p> <p>The Operator declared that the following emission points have been removed therefore, these will not be included in the consolidated permit:</p> <ul style="list-style-type: none"> • A4, A20, A21, A45, A54, A62, A81, A82, A83, A84, A85, and A97.
6	Energy Efficiency	CC	The Operator has provided information to support compliance with BATc 6. We have assessed the information provided and we are

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	<p>In order to increase energy efficiency, BAT is to use an energy efficiency plan (BAT 6a) and an appropriate combination of the common techniques listed in technique 6b within the table in the BATc.</p>		<p>satisfied that the operator has demonstrated compliance with BATc 6.</p> <p>The Operator declared that it has a monitoring strategy and energy management plan in development, but not ready yet, parts of it being divided between multiple files.</p> <p>Energy efficiency techniques used at this installation are:</p> <ul style="list-style-type: none"> • Burner regulation and control • Energy efficient motors • Heat recovery where possible; looking to upgrade in the future • LED lighting • Minimising boiler blowdown • Preheat of feed water • Process control systems • Reducing heat loss through isolation by automated process • Reduce compressed air system leaks • Variable speed drives • Multiple effect evaporation <p>Improvement condition IC26 has been included in the permit to demonstrate compliance with BATc 6(a) was achieved on or before 04/12/2023 (see Annex 3).</p>
7	<p>Water and wastewater minimisation</p> <p>In order to reduce water consumption and the volume of waste water discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k given below.</p> <p>(a) water recycling and/or reuse</p> <p>(b) Optimisation of water flow</p> <p>(c) Optimisation of water nozzles and hoses</p>	CC	<p>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.</p> <p>The following techniques are used at this site:</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	(d) Segregation of water streams Techniques related to cleaning operations: (e) Dry cleaning (f) Pigging system for pipes (g) High-pressure cleaning (h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP) (i) Low-pressure foam and/or gel cleaning (j) Optimised design and construction of equipment and process areas (k) Cleaning of equipment as soon as possible		<ul style="list-style-type: none"> • Water recycling and/or reuse – final CIP rinse is recovered for CIP first flush (all automated CIP's). • Optimisation of water flow – all process plants have orifice plates to control the maximum flow of each plant to about 30 m³ (process). • Optimisation of water nozzles and hoses – some nozzles operate a water saving function • Segregation of water streams to some process lines, dependant on recipes • High-pressure cleaning – pressure washers are used for external cleaning of equipment, tanks, floors, and walls • Optimisation of chemical dosing and water use in (CIP) – conductivity meters are calibrated periodically and plants are CIP optimised during the installation phase. • Low-pressure foam and/or gel cleaning – foam cleaning (Delladet) is used for external cleaning of machinery across site. • Optimised design and construction of equipment and process areas – all machinery/equipment is designed specifically for the intended product, process plants are also designed to be as efficient as possible for the intended products. • Cleaning of equipment as soon as possible
8	Prevent or reduce the use of harmful substances In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below. (a) Proper selection of cleaning chemicals and/or disinfectants (b) Reuse of cleaning chemicals in cleaning-in-place (CIP) (c) Dry cleaning (d) Optimised design and construction of equipment and process areas	CC	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 following techniques are used at this site:

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
			<ul style="list-style-type: none"> Optimised design and construction of equipment and process areas Recovery tanks for reuse of cleaning chemicals in CIP
9	<p>Refrigerants</p> <p>In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.</p>	CC	<p>The Operator has provided information to support compliance with BATc 9. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 9.</p> <p>The Operator declared that they are actively working to develop a standalone refrigerants replacement plan which currently is divided between multiple documents.</p> <p>Refrigerant gases used at this installation are:</p> <ul style="list-style-type: none"> R134A – water chillers x3 R404A – Chillers x10 R407A – Chillers x 2 <p>Ammonia, a gas with a low GWP value, is also used for refrigeration purposes.</p> <p>Improvement condition IC27 has been included in the permit to demonstrate compliance is achieved (see Annex 3).</p>
10	<p>Resource efficiency</p> <p>In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <ol style="list-style-type: none"> Anaerobic digestion Use of residues Separation of residues Recovery and reuse of residues from the pasteuriser Phosphorus recovery as struvite Use of waste water for land spreading 	CC	<p>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.</p> <p>The following techniques are used:</p> <ul style="list-style-type: none"> Off-site anaerobic digestion of process and production waste. Separation of residue

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
11	<p>Waste water buffer storage In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.</p>	CC	<p>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.</p> <p>The Operator declared they have sufficient buffer capacity in three sumpits for effluent storage of 100 m³ each, 4 tanks of 400 m³ combined. The site has an automated alarm system when monitored parameters such as pollutant strength or tank capacity is too high. In addition, the site utilises automated slam-shut vales. Spillages are directed to the ETP for treatment.</p>
12	<p>Emissions to water – treatment In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below. Preliminary, primary and general treatment (a) Equalisation (b) Neutralisation (c) Physical separate (eg screens, sieves, primary settlement tanks etc) Aerobic and/or anaerobic treatment (secondary treatment) (d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc) (e) Nitrification and/or denitrification (f) Partial nitrification - anaerobic ammonium oxidation Phosphorus recovery and/or removal (g) Phosphorus recovery as struvite (h) Precipitation (i) Enhanced biological phosphorus removal Final solids removal (j) Coagulation and flocculation (k) Sedimentation (l) Filtration (eg sand filtration, microfiltration, ultrafiltration)</p>	CC	<p>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.</p> <p>The Operator declared that they are using:</p> <ul style="list-style-type: none"> • Neutralisation • Primary physical separation

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement										
	(m) Flotation												
12	<p>Emissions to water – treatment BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body</p> <table border="1" data-bbox="277 443 1086 767"> <thead> <tr> <th data-bbox="277 443 627 507">Parameter</th> <th data-bbox="627 443 1086 507">BAT-AEL ⁽¹⁵⁾ ⁽¹⁶⁾ (daily average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="277 507 627 571">Chemical oxygen demand (COD) ⁽¹⁷⁾ ⁽¹⁸⁾</td> <td data-bbox="627 507 1086 571">25-100 mg/l ⁽¹⁹⁾</td> </tr> <tr> <td data-bbox="277 571 627 635">Total suspended solids (TSS)</td> <td data-bbox="627 571 1086 635">4-50 mg/l ⁽²⁰⁾</td> </tr> <tr> <td data-bbox="277 635 627 699">Total nitrogen (TN)</td> <td data-bbox="627 635 1086 699">2-20 mg/l ⁽²¹⁾ ⁽²²⁾</td> </tr> <tr> <td data-bbox="277 699 627 767">Total phosphorus (TP)</td> <td data-bbox="627 699 1086 767">0,2-2 mg/l ⁽²³⁾</td> </tr> </tbody> </table> <p>(16) The BAT-AELs may not apply to the production of citric acid or yeast (17) No BAT-AEL applies for biochemical oxygen demand (BOD). As an indication, the yearly average BOD5 level in the effluent from a biological waste water treatment plant will generally be ≤ 20 mg/l. (18) The BAT-AEL for COD may be replaced by a BAT-AEL for TOC. The correlation between COD and TOC is determined on a case-by-case basis. The BAT-AEL for TOC is the preferred option because TOC monitoring does not rely on the use of very toxic compounds. (20) The lower end of the range is typically achieved when using filtration (e.g. sand filtration, microfiltration, membrane bioreactor), while the upper end of the range is typically achieved when using sedimentation only. (21) The upper end of the range is 30 mg/l as a daily average only if the abatement efficiency is ≥ 80 % as a yearly average or as an average over the production period. (22) The BAT-AEL may not apply when the temperature of the waste water is low (e.g. below 12 °C) for prolonged periods.</p>	Parameter	BAT-AEL ⁽¹⁵⁾ ⁽¹⁶⁾ (daily average)	Chemical oxygen demand (COD) ⁽¹⁷⁾ ⁽¹⁸⁾	25-100 mg/l ⁽¹⁹⁾	Total suspended solids (TSS)	4-50 mg/l ⁽²⁰⁾	Total nitrogen (TN)	2-20 mg/l ⁽²¹⁾ ⁽²²⁾	Total phosphorus (TP)	0,2-2 mg/l ⁽²³⁾	NA	<p>We are satisfied that BAT-AELs are not applicable to this installation.</p> <p>The BAT-AELs are applicable to installations that have discharges of process effluent to a receiving water body. This it is only discharging uncontaminated run-off water to site's pond via water emission points W2A to D, W2E, W3, W4, W5, W6, and W7 (labelled in the extant variation as SW2 to SW7).</p> <p>The current permit variation contains COD limits of 20 mg/l for emission points W2A, W2E, W3, W4,W5, W6, W7 along with monitoring requirements which have been removed as part of this variation as the runoff water is uncontaminated.</p>
Parameter	BAT-AEL ⁽¹⁵⁾ ⁽¹⁶⁾ (daily average)												
Chemical oxygen demand (COD) ⁽¹⁷⁾ ⁽¹⁸⁾	25-100 mg/l ⁽¹⁹⁾												
Total suspended solids (TSS)	4-50 mg/l ⁽²⁰⁾												
Total nitrogen (TN)	2-20 mg/l ⁽²¹⁾ ⁽²²⁾												
Total phosphorus (TP)	0,2-2 mg/l ⁽²³⁾												
13	<p>Noise management plan</p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; 	NA	<p>We are satisfied that BATc 13 is not applicable to this Installation.</p> <p>A noise management plan is only required where noise nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated noise nuisances from the site therefore an NMP is not a requirement for this site.</p>										

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	- a noise reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.		
14	<p>Noise management</p> <p>In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques given below.</p> <p>(a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement</p>	CC	<p>The Operator has provided information 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.</p> <p>The Operator declared they are using the following noise management techniques:</p> <ul style="list-style-type: none"> • Appropriate location of equipment and buildings • Operational measures including the sourcing of low noise generating machinery and equipment.
15	<p>Odour Management</p> <p>In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:</p> <ul style="list-style-type: none"> - a protocol containing actions and timelines; - a protocol for conducting odour monitoring. - a protocol for response to identified odour incidents eg complaints; - an odour prevention and reduction programme designed to identify the source(s); to measure/estimate odour exposure: to characterise the contributions of the sources; and to implement prevention and/or reduction measures. 	NA	<p>We are satisfied that BATc 15 is not applicable to this installation.</p> <p>An odour management plan is only required where odour nuisance at sensitive receptors is expected or has been substantiated. There have been no substantiated odour nuisances from the site therefore an OMP is not a requirement for this site.</p>
SOFT DRINKS AND NECTAR/ JUICE MADE FROM PROCESSED FRUIT AND VEGETABLES BAT CONCLUSIONS (BAT 33)			
33	<p>Energy efficiency – Soft drinks and nectar/ juice made from processed fruit and vegetables</p> <p>In order to increase energy efficiency, BAT is to use an appropriate combination of the techniques specified in BAT 6 and of the techniques given below.</p>	CC	<p>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.</p>

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries			Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	Technique	Description	Applicability		
	(a)	Single pasteuriser for nectar/juice production	Use of one pasteuriser for both the juice and the pulp instead of using two separate pasteurisers.	May not be applicable due to the pulp particle size.	The Operator declared that all sugar is hydraulically transported, and that each production line has a single pasteuriser. The site also uses energy efficient homogenisers.
	(b)	Hydraulic sugar transportation	Sugar is transported to the production process with water. As some of the sugar is already dissolved during the transportation, less energy is needed in the process for dissolving sugar.	Generally applicable.	
	(c)	Energy-efficient homogeniser for nectar/juice production	See BAT 21b.		
Soft Drinks and Nectar/ Juice made from processed fruit and vegetables sector Environmental Performance Levels					
EPL	Environmental Performance Level – Energy consumption for the Soft Drinks and Nectar/ Juice made from processed fruit and vegetables sector			CC	<p>The Operator has provided information to support compliance with BAT-EPL. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT-EPL.</p> <p>The Operator declared an energy consumption of 0.016 MWh/hl, which is within the EPL range of 0.01 – 0.035 MWh.</p>
	Unit	Specific energy consumption (yearly average)			
	MWh/hl of products	0.01 – 0.035			
EPL	Environmental Performance Level – Specific waste water discharge for the Soft Drinks and Nectar/ Juice made from processed fruit and vegetables sector			CC	<p>The Operator has provided information to support compliance with BAT-EPL. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT-EPL.</p> <p>The Operator declared an yearly average of 0.08 m³/hl, which is within the EPL range of 0.08 – 0.2 m³/hl.</p>
	Unit	Specific waste water discharge (yearly average)			
	m ³ /hl of products	0.08 – 0.20			

Annex 2: Review and assessment of changes that are not part of the BAT Conclusions derived permit review

Updating permit during permit review consolidation

- Introductory note updated
- Site plan
- Table S1.1 overhaul
 - Activity Reference (AR) renumbering
 - Updated listed activities
 - Addition of production capacity
 - Directly associated activities (DAAs) standardisation

We have updated permit conditions to those in the current generic permit template as a part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.

Capacity Threshold

The Environment Agency is looking to draw a “line in the sand” for permitted production capacity; a common understanding between the Operator and regulator for the emissions associated with a (maximum) level of production, whereby the maximum emissions have been demonstrated as causing no significant environmental impact.

We have included a permitted production level (capacity) within table S1.1 of the permit for the section 6.8 listed activity and we need to be confident that the level of emissions associated with this production level have been demonstrated to be acceptable.

The Operator has completed a H1 assessment of emissions for typical figures of production at the time of permitting.

The H1 assessment is not valid for the maximum capacity stated within the permit or if production is now higher, raising from 726,406 tonnes in 2016 to 2,300 tonnes per day in 2021, equivalent to 839,500 tonnes per year.

Because the Operator does not have discharges to controlled waters nor dust emissions to air, we do not consider that the increased capacity poses a significant pollution risk to the environment or human receptors therefore, we will not be asking for a revised H1 Assessment.

Emissions to Air

We asked the operator to list all emission points to air from the installation in the Regulation 61 notice. And to provide a site plan indicating the locations of all air emission points.

The operator has provided an up to date air emission plan.

Existing Medium Combustion Plant (1MW-50MW)

We asked the Operator to provide information on all combustion plant on site in the Regulation 61 Notice as follows:

- Number of combustion plant (CHP engines, back-up generators, boilers);
- Size of combustion plant – rated thermal input (MWth)
- Date each combustion plant came into operation

The Operator provided the information in the table(s) below:

Boilers

1. Rated thermal input (MW) of the medium combustion plant.	17.2 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler 1 – 5.6 MWth Boiler 2 – 5.6 MWth Boiler 3 – 6.0 MWth
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas 100%, and gas oil for emergencies only
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	All MCPs commissioned in January 2007

We have reviewed the information provided and we consider that the declared combustion plant qualify as “existing” medium combustion plant.

For existing medium combustion plant with a rated thermal input greater than 5 MW, Boilers 1, 2, and 3, the emission limit values set out in tables 2 and 3 of Part 1 of Annex II MCPD shall apply from 1 January 2025.

We have retained the previous emission limits values and monitoring requirements for Boilers 1, 2, and 3, as per variation (V007). In addition, we have included boilers operating limits and reporting requirements when gas oil is used for emergencies.

Emissions to Water and implementing the requirements of the Water Framework Directive

We asked the Operator to provide information on all emissions to water at the installation in the Regulation 61 Notice as follows;

- Identify any effluents which discharge directly to surface or groundwater;
- Provide an assessment of volume and quality, including results of any monitoring data available;
- and for any discharges to water / soakaway whether a recent assessment of the feasibility of connection to sewer has been carried out.

The operator has previously provided assessments for all emissions to water at the installation. The operator declares there has been no change to activities and subsequent effluents generated at the installation since this risk assessment was

taken. Consequently, we agree that the original risk assessments remain valid at this time.

Soil & groundwater risk assessment (baseline report)

The IED requires that the operator of any IED installation using, producing or releasing “relevant hazardous substances” (RHS) shall, having regarded the possibility that they might cause pollution of soil and groundwater, submit a “baseline report” with its permit application. The baseline report is an important reference document in the assessment of contamination that might arise during the operational lifetime of the regulated facility and at cessation of activities. It must enable a quantified comparison to be made between the baseline and the state of the site at surrender.

At the definitive cessation of activities, the Operator has to satisfy us that the necessary measures have been taken so that the site ceases to pose a risk to soil or groundwater, taking into account both the baseline conditions and the site’s current or approved future use. To do this, the Operator has to submit a surrender application to us, which we will not grant unless and until we are satisfied that these requirements have been met.

The Operator declared that they never had a site condition report, a soil and groundwater baseline report, or had conducted a Stage 1-3 Assessment of hazardous chemicals stored and used on site.

We have included an Improvement condition in the permit (IC28) which requires the Operator to submit an updated site condition report which includes baseline soil and groundwater data. See Improvement condition(s) in Annex 3 of this decision document.

Climate Change Adaptation

The operator has considered if the site is at risk of impacts from adverse weather (flooding, unavailability of land for land spreading, prolonged dry weather / drought) .

The operator has identified the installation as likely to be or has been affected by prolonged dry weather/ drought, which we consider to be a severe weather event.

We do not consider the operator to have submitted a suitable climate change adaptation plan for the installation. We have included an improvement condition into the permit (IC29) to request a climate change adaptation plan is submitted by the operator for approval from the Environment Agency.

Containment

We asked the Operator via the Regulation 61 Notice to provide details of the each above ground tanks which contain potentially polluting liquids at the site, including tanks associated with the effluent treatment process where applicable.

The Operator provided details of all tanks;

- Tank reference/name
- Contents
- Capacity (litres)

- Location
- Construction material(s) of each tank
- The bunding specification including
 - Whether the tank is bunded
 - If the bund is shared with other tanks
 - The capacity of the bund
 - The bund capacity as % of tank capacity
 - Construction material of the bund
 - Whether the bund has a drain point
 - Whether any pipes penetrate the bund wall
- Details of overfill prevention
- Drainage arrangements outside of bunded areas
- Tank filling/emptying mitigation measures (drips/splashes)
- Leak detection measures
- Details of when last bund integrity test was carried out
- Maintenance measures in place for tank and bund (inspections)
- How the bund is emptied
- Details of tertiary containment

and whether the onsite tanks currently meet the relevant standard in the Ciria “Containment systems for the prevention of pollution (C736)” report.

We reviewed the information provided by the operator and their findings. We are not satisfied that the existing tanks and containment measures on site meet the standards set out in CIRIA C736.

The Operator submitted a list of tanks and associated bunds on 20/12/2023. A number of tanks such as ‘High strength effluent’, glycol, or ingredients with high COD and BOD content are not bunded.

We have set improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site (IC30). See Improvement condition(s) in Annex 3 of this decision document.

Carbon Dioxide Recovery

We asked the Operator as part of the Regulation 61 Notice to confirm whether carbon dioxide (CO₂) is recovered from the fermentation stage of the process. Where this recovery is not currently in place, we asked them to provide a summary of any feasibility study carried out.

CO₂ recovery is a recognised technique to be considered in the determination of BAT as described in Chapter 4.4.4.3 of the FDM BREF. The stated environmental benefits include reduced carbon emissions from the permitted installation.

The economics of on-site recovery at the time of the BREF review was a relevant factor in determining whether CO₂ recovery was included as a specific BAT Conclusion. It was noted at the time that industrial gas suppliers were able to provide CO₂ obtained as a co-product from other sectors, such as during ammonia production, at low cost and as readily available resource.

This situation has now changed in the UK over the last two years, primarily due to energy prices. Ammonia is no longer produced in the UK and the CO₂ supply chain is fragile and dependent on imports. Defra and Department for Business and Trade are keen on diversification of CO₂ supply to increase supply resilience.

However, CO₂ recovery is not a process applicable to this site as there are no brewing activities carried out. This installation produces only soft drinks and carbonated beverages utilising imported carbon dioxide.

Annex 3: Improvement Conditions

Based on the information in the Operator’s Regulation 61 Notice response and our own records of the capability and performance of the installation at this site, we consider that we need to set improvement conditions so that the outcome of the techniques detailed in the BAT Conclusions are achieved by the installation. These improvement conditions are set out below - justifications for them is provided at the relevant section of the decision document (Annex 1 or Annex 2).

Previous improvement conditions marked as complete in the previous permit.

Superseded Improvement Conditions – Removed from permit as marked as “complete”	
Reference	Improvement Condition
IC1	The operator shall provide to the environment Agency documentation to show that a Climate Change Agreement has been put in place.
IC2	The operator shall develop a sampling and monitoring programme to demonstrate to the satisfaction of the Environment Agency that there is a management system in place to demonstrate compliance of the installation with condition 2.2.2.5 and that there is little likelihood of contamination of site drainage which would lead to a discharge to controlled waters.
IC3	The operator shall conduct a noise survey to demonstrate that the predicted noise levels within the Express Park development and at the residential receptors identified in the application are at an acceptable level. A report shall be submitted to the Environment agency within four months of the survey detailing any noise levels expected to give cause to reasonable annoyance together with a noise management plan to rectify these levels.
IC4	Numbering error
IC5	The operator shall conduct a water audit and report on water usage against the proposed targets presented in the application and any future plans to ensure efficient water usage, a written report should be submitted to the Environment Agency within four months of the completion of the audit.
IC6	Numbering error
IC7	The operator shall provide a written report, which details the implemented EMS and demonstrates how this will ensure that the installation meets and maintains BAT.
IC8	The operator shall review the emissions of all polluting substances from the process, other than those given limits in this permit. A written report of the review, quantifying these emissions or demonstrating that they are insignificant shall be forwarded to the Environment Agency.
IC9	The operator shall conduct a waste minimisation audit and report the findings against the targets presented in the application and any future plans to further improve upon the application targets, in particular consideration shall be given to production planning to minimise wastage, a written report shall be submitted to the Environment Agency within three months of the completion of the audit.
IC10	The operator shall review the potential to reuse spent caustic and other cleaning solutions and present a written report within two

	months of the review, detailing plans and timescales to implement any identified potential improvements.
IC11	The operator shall conduct an energy audit to demonstrate that the predicted use of energy within the Express Park development is consistent with the predicted levels indicated in the application. A written report shall be submitted to the Environment Agency detailing the findings and identifying any improvements and their implementation timescales within two months of the audit.
IC12	The operator shall submit a plan detailing the site closure plan.
IC13	The operator shall assess the proposed methods for effluent flow and pH monitoring to ensure that they comply with the requirements given in the MCERTS standard 'Minimum requirements for the self-monitoring of effluent flow 'version 2, Aug 2004. A written report shall be provided to the Agency detailing how this standard is to be achieved.
IC14	The operator shall compile a list of all waste streams and quantify the quantity of waste and the environmental impact of each stream; these shall to be compared with the submissions in the original application. A written report shall be submitted to the Environment Agency within three months of the assessment detailing the potential to prevent or reduce these environmental impacts together with a proposed reduction programme.
IC15	The operator shall submit drawings to the Environment Agency showing the location of the hydrogen peroxide vents in phases 1, 2, 3 and 4.
IC16	The operator shall submit a written report to the Environment Agency detailing the practicality and benefits of monitoring Brix or TOC or any other variable on the batch effluent discharged to be used as a surrogate measure in place of the appropriate limits set in table 2.2.8. The report shall include the relationship between any proposed surrogate measure and the limit to be replaced. Where appropriate the operator shall submit alternative limits to be used in table 2.2.8 and on approval from the Agency these limits may be adopted.
IC17	The operator shall investigate the potential to use the surrogate measures used to monitor the effluent discharge and identified in IP16 in a management system to provide information regarding production losses to effluent on a real time basis. The management system should consider but not be limited to SPC (Statistical Process Control) type systems to provide online data to process operators such that abnormal trends in production loses could be readily identified and acted upon
IC18	Retained and renumbered IC31
IC19	Retained and renumbered IC32
IC20	Retained and renumbered IC33
IC21	The operator shall review the secondary containment for the gas oil storage and waste storage tanks at plot 5 (chill store) to ensure that the secondary containment is impervious to the materials stored. The review shall also include the measures used to ensure that the preventative measures used to ensure that the tanks are not over filled are adequate, and where appropriate propose and install additional safeguards to prevent over filling.
IC22	The operator shall submit drawings to the Environment Agency showing the location of vents in the chilled warehouse.

IC23	Retained and renumbered IC34
IC24	The operator shall agree with the sewage undertaker (Wessex Water) that the limits in table 2.2.8 are within the limits specified by the Trade Effluent Consent. Written confirmation of compliance with the Trade Effluent Consent shall be supplied to the Environment Agency. Failure to provide such conformation will result in the appropriate limits reverting to the limits previously specified in table 2.2.8 of the original permit RP3430BH. To ensure clarity upon receipt of confirmation from the operator on compliance or non-compliance with the Trade Effluent Consent then the Environment Agency shall write to the operator stating the appropriate limits to be applied.
IC25	The operator shall submit an updated site condition report which is representative of the current operations undertaken at the installation, following the Environment Agency guidance: H5 Site Condition Report guidance.

The following improvement conditions have added to the permit as a result of the variation.

Improvement programme requirements		
Reference	Reason for inclusion	Justification of deadline
IC26	The operator shall confirm, achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT is currently not demonstrated or achieved with respect to BATc 6. Refer to BAT Conclusions for a full description of the BAT requirement.	3 months from permit issue
IC27	The operator shall use refrigerants without ozone depletion potential and with a low global warming potential (GWP) in accordance with BAT 9 from the Food, Drink and Milk Industries BATCs. To demonstrate compliance against BAT 9, the operator shall produce a plan for the onsite refrigerant system(s) at the installation. The plan is to be assessed by the Environment Agency and shall be incorporated within the existing environmental management system. The plan should include, but not be limited to, the following: <ul style="list-style-type: none"> • Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible. • An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP. 	3 months from permit issue
IC28	The Operator shall produce a Site Condition Report (SCR) in line with our H5 Guidance. The report shall contain the information necessary to determine the state of soil and groundwater and ensure this is	12 months from permit issue

	maintained throughout the life of the permit by using the results to better inform the SPMP. The report shall be submitted to the Environment Agency for review.	
IC29	<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"> • Details of how the installation has or could be affected by severe weather; • The scale of the impact of severe weather on the operations within the installation; • An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation. <p>The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.</p>	12 months from permit issue or other date as agreed in writing with the Environment Agency
IC30	<p>The Operator shall undertake a survey of the primary, secondary and tertiary containment at the site and review measures against relevant standard including:</p> <ul style="list-style-type: none"> • 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 <p>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</p> <ul style="list-style-type: none"> • current containment measures • any deficiencies identified in comparison to relevant standards, • improvements proposed • time scale for implementation of improvements. <p>The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency.</p>	12 months from permit issue
IC31	The operator shall update the site closure plan when phases 3 and 4 are completed.	12 months following completion of phase(s) or as agreed
IC32	The operator shall review the accident management plan for the site when phases 3 and 4 are completed.	3 months following completion of phase(s) or as agreed
IC33	The operator shall update the SPMP (Site protection and monitoring programme) when phase 3 and 4 are completed.	12 months following completion of

		phase(s) or as agreed
IC34	The operator shall inform the Environment agency in writing confirming the completion dates of phase 3 and phase 4 developments.	1 month following completion of phase(s)