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/QP3434SH
The Operator is:	Britvic Soft Drinks Limited
The Installation is:	Soft Drinks Facility Rugby
This Variation Notice number is:	EPR/QP3434SH/V009

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 09/11/2021 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 10/03/2022.

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 9 and 14. The operator does not currently comply with the requirements of BATc 9 and 14. In relation to these BAT Conclusions, the operator has committed compliance by 4 December 2023. We have therefore included Improvement Conditions IC16 and IC17 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 12/07/2023 for information relating to BATc6, BATc8, BATc14, BATc33, air emissions, water emission data, water emissions and relevant hazardous substances. 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	**Environmental Management System - Improve overall environmental performance.** Implement an EMS that incorporates all the features as described within BATc 1.	**CC**	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. The operator has a EMS externally accredited to the ISO14001 standard.
2	**EMS Inventory of inputs & outputs. Increase resource efficiency and reduce emissions.** 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.	**CC**	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. The operator has an EMS externally accredited to the ISO14001 standard.
3	**Monitoring key process parameters at key locations for emissions to water.** 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 inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).	**CC**	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. Process effluent is pumped into an underground tank on site, from where it is then pumped into Buffer Storage Tanks for chemical dosing with Sodium Hydroxide (NaOH) or Hydrochloric Acid (HCl) to adjust the effluent's acidity prior to discharge into the foul sewer outlet. The final effluent discharge is measured volumetrically by a flow meter and a sampling well captures a 24-hour composite sample, that is analysed daily and the result recorded. The operator undertakes a combination of both spot & composite sampling on waste water discharge that leaves the installations. The typical determinants that are monitored through the spot and / or composite sampling are COD, suspended solids, total daily flow, free from soluble oil, total phosphorous, and pH.

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
4	**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.	**NA**	We are satisfied that BATc 4 is not applicable to this Installation. The process effluent is treated on site and then discharged to foul sewer under a discharge consent so there are no direct discharges of process effluent to surface water.
5	**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.	**NA**	We are satisfied that BATc 5 is not applicable to this Installation. There are no relevant channelled emissions to air from the process that require monitoring under BATc 5.
6	**Energy Efficiency** 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.	**CC**	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. The Operator has an Energy Savings Opportunities Scheme (ESOS) in place which covers multiple sites which are operated by Britvic Soft Drinks Limited. However, the ESOS still identify specific techniques for the Rugby site, these techniques are appropriate to meet compliance with BATc 6, such as implementation of PIR sensors and LED lighting implementation.
7	**Water and wastewater minimisation** 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. (a) water recycling and/or reuse (b) Optimisation of water flow (c) Optimisation of water nozzles and hoses (d) Segregation of water streams Techniques related to cleaning operations: (e) Dry cleaning	**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 Operator implements the following techniques on sites in order to minimise water consumption and wastewater, in line with the techniques described: a) The facility reuses water from the process, the wastewater from the final rinse is utilised in during the first rinse of the next CIP.

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
	(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		b) Rinse water optimisation projects have been completed which reduce the amount of water used to complete a CIP. h) The operator is currently installing utility monitoring equipment, to allow them to trend and have a live views on water usage at site to drive future improvements and savings. a) Continuous improvements are in progress that focus largely on optimising processes to reduce syrup loss.
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 8. We have assessed the information provided. We are not satisfied that the operator has demonstrated compliance with BATc 8. The Operator controls cleaning chemicals via the Site Control of Chemicals Standard and reviews these regularly via the Sypol Chemical Management System. The Operator provided further information on the Sypol system explaining that it considers a hierarchy of control, as well as identifying substances that have the potential to harm the environment / aquatic life and the recommended associated control measures required to prevent harm which are followed by the site.
9	**Refrigerants** 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.	**FC**	The operator has provided information to support compliance with BATc 9. We have assessed the information provided. We are not satisfied that the operator has demonstrated compliance with BATc 9. Britvic has a provided information and a plan which focuses on the replacement of HFC's on site, these have been replaced with the use of Ammonia for the main chiller systems to reduce the impact of ozone depleting substances at the site. However, the site also uses other refrigerants with high global warming potential (GWP) such as R404a and R410a. An updated plan including, but not be limited to a plan to retro fill systems containing high GWP

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
			refrigerants e.g. R-404A with lower GWP alternatives as soon as possible. We have included improvement condition IC17 in the permit to achieve compliance. The operator is required to complete the improvement conditions and demonstrate compliance with the BATc9 by the compliance date, 4 December 2023. See Annex 3.
10	**Resource efficiency** In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below: (a) Anaerobic digestion (b) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser (e) Phosphorus recovery as struvite (f) Use of waste water for land spreading	**CC**	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 carries out a number of techniques to increase resource efficiency, such as the use of anaerobic digestion for appropriate waste products. In addition they also utilise the following techniques: • ensures all surplus / waste PET is sent for re-processing or to be re-used as RPet. • Continuous Improvement Projects in place to reduce waste from Syrup Loss • where possible waste juice products are sent to be utilised in animal feed production • food waste is recycled either via composting or land spreading • a yearly goal is in place to achieved 0% waste to landfill
11	**Waste water buffer storage** In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.	**CC**	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. The sites process effluent is pumped into above ground balancing tanks (buffer), where the effluent is re-circulated to achieve a pH concentration consistent with the requirements of the trade effluent consent. The wastewater flows between the underground storage tank and above ground balancing tanks are monitored continuously to prevent over filling. The four buffer tanks have 75m^3 capacity

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			each and an additional overflow tank of 20m^3 to store waste water until final discharge.
12	**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) Nitification and/or denitrification (f) Partial nitration - 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) (m) Flotation	**CC**	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 operator treats the process effluent on site by implementing the following techniques (a) Equalisation and (b) Neuralisation and (l) Filtration. The process wastewater is pumped into an underground tank, from where it is then pumped into buffer storage tanks where it is chemically dosed with Sodium Hydroxide (NaOH) or Hydochloric Acid (HCL) to adjust the effluent's acidity prior to discharge. Within the balancing tanks the effluent is re-circulated to achieve a pH concentration consistent with the requirements of the trade effluent consent, before final discharge into the foul sewer outlet. The wastewater is drawn from the underground tank at mid height so that sediment is not drawn from the bottom and floating solids are not drawn from the surface. There is a mesh filter that cover the underground tank inlet pipe. There are dual in-line filters between the underground tank and the balancing tanks that serve the purpose of capturing any solids within the drawn of wastewater. The filters are cleaned out on a daily basis or whenever the pressure differential across the filter increases.
12	**Emissions to water – treatment** **BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body**	**NA**	BAT-AELs are not applicable for the emissions to water as there are no direct discharge to a receiving body of water. All wastewater effluent is discharged from the sites water treatment plant to Severn Trent Sewer Outfall.

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
	<table><tr><th>Parameter</th><th>BAT-AEL ([15]) ([16]) (daily average)</th></tr><tr><td>Chemical oxygen demand (COD) ([17]) ([18])</td><td>25-100 mg/l ([19])</td></tr><tr><td>Total suspended solids (TSS)</td><td>4-50 mg/l ([20])</td></tr><tr><td>Total nitrogen (TN)</td><td>2-20 mg/l ([21]) ([22])</td></tr><tr><td>Total phosphorus (TP)</td><td>0,2-2 mg/l ([23])</td></tr></table> (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.		
13	**Noise management plan** 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: - a protocol containing actions and timelines; - a protocol for conducting noise emissions monitoring; - a protocol for response to identified noise events, eg complaints; - 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.	**NA**	BAT 13 is only applicable to cases where a noise nuisance at sensitive receptors is expected and/or has been substantiated, or if forms part of an existing permit requirement. There is no existing permit requirement and the site has no recent history of noise complaints therefore an noise management plan is not required.
14	**Noise management**	**FC**	The Operator stated that BATc14 was not applicable as there are no noise sensitive receptors, we informed the operator that BATc14 is applicable to all sites. In response to this the Operator provided

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
	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. (a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement		further supporting information to support compliance with BATc 14. We have assessed the information provided; we are not satisfied that the operator has demonstrated compliance with BATc 14. The Operator highlighted that an Air Quality Assessment by Fichtner considered noise and its impact on the environment and provided a copy of this. The operator has stated an internal environmental noise monitoring survey is due to take place in October 2023 to confirm that the results of the original survey undertaken by Fichtner still stand. However, this assessment and report was produced for a previous variation application and does not cover the site regarding noise management in general. The operator needs to provide further information on which combination of techniques are used on site to demonstrate compliance with BATc14. We have included improvement condition IC16 in the permit to achieve compliance. The operator is required to complete the improvement conditions and demonstrate compliance with the BATc14 by the compliance date, 4 December 2023. See Annex 3.
15	**Odour Management** 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: - 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**	BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated, or if forms part of an existing permit requirement. There is no existing permit requirement and the site has no recent history of odour complaints therefore an odour management plan is not required.

<table>
<tr><th>BATC No.</th><th>Summary of BAT Conclusion requirement for Food, Drink and Milk Industries</th><th>Status NA/ CC / FC / NC</th><th>Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement</th></tr>
<tr><td colspan="4">SOFT DRINKS AND NECTAR/ JUICE MADE FROM PROCESSED FRUIT AND VEGETABLES BAT CONCLUSIONS (BAT 33)</td></tr>
<tr><td>33</td><td>Energy efficiency – Soft drinks and nectar/ juice made from processed fruit and vegetables

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.

<table>
<tr><th colspan="2">Technique</th><th>Description</th><th>Applicability</th></tr>
<tr><td>(a)</td><td>Single pasteuriser for nectar/juice production</td><td>Use of one pasteuriser for both the juice and the pulp instead of using two separate pasteurisers.</td><td>May not be applicable due to the pulp particle size.</td></tr>
<tr><td>(b)</td><td>Hydraulic sugar transportation</td><td>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.</td><td>Generally applicable.</td></tr>
<tr><td>(c)</td><td>Energy-efficient homogeniser for nectar/juice production</td><td>See BAT 21b.</td><td></td></tr>
</table>

Applicable in addition to BAT6</td><td>FC</td><td>The operator has stated they are currently not complaint with BATc 33. We have assessed the information provided and we agree with the Operator that they are currently not compliant with BATc 33.

Britvic have a number of initiatives which have been considered and some completed to reduce energy use. However, they have not currently implemented any of the BAT techniques listed in BAT33.

We have included an improvement condition IC16 to ensure compliance against BATc33. The operator is required to complete the improvement condition and demonstrate compliance with BATc33 by the compliance date, 4 December 2023. See Annex 3.</td></tr>
<tr><td colspan="2">Soft Drinks and Nectar/ Juice made from processed fruit and vegetables sector Environmental Performance Levels</td><td></td><td></td></tr>
<tr><td>EPL</td><td>Environmental Performance Level – Energy consumption for the Soft Drinks and Nectar/ Juice made from processed fruit and vegetables sector

<table>
<tr><td>Unit</td><td>Specific energy consumption (yearly average)</td></tr>
<tr><td>MWh/hl of products</td><td>0.01 – 0.035</td></tr>
</table></td><td>CC</td><td>The operator has provided information to support compliance with the EPL for energy consumption.

The operator reports that the site achieved a specific energy consumption of 0.009 MWh/hl of products, which is below the EPL range for soft drinks demonstrating good energy efficiency.</td></tr>
<tr><td>EPL</td><td>Environmental Performance Level – Specific wastewater discharge for the Soft Drinks and Nectar/ Juice made from processed fruit and vegetables sector

<table>
<tr><td>Unit</td><td>Specific waste water discharge (yearly average)</td></tr>
<tr><td>m^3/hl of products</td><td>0.08 – 0.20</td></tr>
</table></td><td>CC</td><td>The operator has provided information to support compliance with the EPL for specific wastewater discharge.

The operator reports that the site achieved a specific waste water discharge of 0.055 m^3/hl of products, which is below the EPL range for soft drinks.</td></tr>
</table>

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

Updating permit during permit review consolidation

- Activity name
- 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.

Pre operational condition (1) has been removed from the permit as it related to the operation of Energy Centre which is currently operating. However, we have included improvement condition (IC19) to ensure the operator demonstrates the necessary procedures are in place for the operation of the Energy Centre and that staff have received the necessary training.

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 existing H1 assessment of emissions to water remains valid for the capacity threshold now placed within table S1.1 of the permit.

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.

Additional emission points which were not previously identified on the permit have been added to ensure the emission points in table S3.1 for accurately reflects the site.

Implementing the requirements of the Medium Combustion Plant Directive
For the existing combustion plant with a rated thermal input less than 1 MW we will not be including any emission limit values or monitoring requirements within the permit, unless any site specific conditions require us to do this.

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:

Combined heat and power (CHP) engines

1. Rated thermal input (MW) of the medium combustion plant.	11.4 MWth	11.4 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Engine 1	Engine 2
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas	Natural gas
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.	February 2019	February 2019

Boilers

1. Rated thermal input (MW) of the medium combustion plant.	12.3 MWth	12.3 MWth	12.3 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler 1	Boiler 2	Boiler 3
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas	Natural gas	Natural gas
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.	February 2019	February 2019	February 2019

Back-up generators

1. Rated thermal input (MW) of the medium combustion plant.	6.8 MWth	6.8 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Diesel engine	Diesel engine
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Gas oil	Gas oil
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.	February 2019	February 2019

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

We have retained the previous emission limits values and monitoring requirements for all existing combustion plants within the permit which specifies the monitoring requirements for the combustion plant in accordance with the MCPD.

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 submitted a site condition report during the original application received on 06/04/2005. The site condition report included a report on the baseline conditions as required by Article 22. We reviewed that report and considered that it adequately described the condition of the soil and groundwater at that time.

The Operator submitted a summary report which referenced the site condition report and baseline report. We have reviewed the information and we consider that it adequately describes the current condition of the soil and groundwater. Consequently, we are satisfied that the baseline conditions have not changed.

Hazardous Substances

Hazardous substances are those defined in Article 3 of Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures

The operator has provided a short risk assessment on the hazardous substances stored and used at the installation. The risk assessment was a stage 1-3 assessment as detailed within EC Commission Guidance 2014/C 136/03.

The stage 1 assessment identified the hazardous substances used / stored on site. The stage 2 assessment identified if hazardous substances are capable of causing pollution. If they are capable of causing pollution they are then termed Relevant Hazardous Substances (RHS). The Stage 3 assessment identified if pollution prevention measures are fit for purpose in areas where hazardous substances are used / stored. This includes drains as well.

The outcomes of the three stage assessment identified that pollution of soil / groundwater to be possible and monitoring is required for these hazardous substances.

The outcomes of the three stage assessment identified that pollution of soil and/or ground water to be unlikely.

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 flooding and 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 (IC18) to request a climate change adaptation plan is submitted by the operator for approval from the Environment Agency.

Containment

We asked the Operator vis 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 appliable.

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. We are satisfied that the existing tanks and containment measures on site meet the standards set out in CIRIA C736.

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).

The improvement conditions which were preciously marked as complete have been removed and are not repeated below. The previous improvement conditions which were not completed but have now been satisfied are listed below and have been removed from the permit.

Superseded Improvement Conditions – Removed from permit as marked as "complete"	
Reference	**Improvement Condition**
IP13	Submit a written report to the Environment Agency for approval. The report must contain the results of an investigation into the existing drainage arrangements of all external operational areas of the installation. The adequacy of current protection measures in the event of spillage with regards to the transportation, storage and containment measures of polluting materials will be assessed with possible pathways to surface waters clearly identified together with proposals for improvement where necessary. The report must contain dates for the implementation of individual additional measures were identified. The notification requirements of condition 1.4.1 will be deemed to have been complied with on submission of the report. You must implement the report as approved, and from the date stipulated by the Environment Agency.

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**
IC16	The operator shall submit, for approval by Environment Agency, a report setting out how the 'Narrative' BAT has been achieved 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: Methodology for achieving BAT Associated targets/timelines, if applicable, for reaching compliance by 4 December 2023. Demonstration of compliance with BAT.	04/12/2023

	The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 14 and 33. Refer to BAT Conclusions for a full description of the BAT requirement.	
IC17	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 develop a replacement plan for the refrigerant systems at the installation. This shall be incorporated within the existing environmental management system by the specified date. The plan should include, but not be limited to, the following: 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.	04/12/2023
IC18	The operator shall produce a climate change adaptation plan. The approved plan will form part of the EMS. The plan shall include, but not be limited to: • 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. The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.	10/11/2024 unless otherwise agreed in writing with the Environment Agency
IC19	The operator shall submit a report demonstrating that the necessary procedures are in place for the operation of the Energy Centre and that staff have received the necessary training. The operator must submit the report to the Environment Agency for review and approval.	10/01/2024 unless otherwise agreed in writing with the Environment Agency