

# **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/BX5930IU  
The Operator is:                        Coca-Cola Europacific Partners Great Britain Limited  
The Installation is:                     Edmonton  
This Variation Notice number is:   EPR/BX5930IU/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 4<sup>th</sup> 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 31/03/2022.

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. The operator currently hasn't demonstrated compliance with the requirements of BATc 11. In relation to this BAT Conclusion, we do not fully agree with the Operator in respect of their current stated capability as recorded in their response to the Regulation 61 Notice. We have therefore included Improvement Conditions IC10 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusions are delivered within 3 months of the variation being issued.

## 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 31/01/2024 concerning BATcs 9, 10, 12, 14, (MCPs), relevant hazardous substances (RHS), and climate change adaptation (CCA). A copy of the further information request was placed on our public register.

In addition to the response to our further information request, we received additional information during the determination from the Operator on 07/03/2024 concerning the ETP, updated emissions site plan, and number of cooling towers. We made a copy of this information available to the public in the same way as the response(s) to our information request.

# **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
<b>GENERAL BAT CONCLUSIONS (BAT 1-15)</b>			
1	<p><b>Environmental Management System - Improve overall environmental performance.</b></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 a EMS externally accredited to the ISO14001 standard.</p>
2	<p><b>EMS Inventory of inputs &amp; outputs. Increase resource efficiency and reduce emissions.</b></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 that they are using the following:</p> <ul style="list-style-type: none"> <li>• Monitoring of process flow to identify emissions and opportunities to reduce waste</li> <li>• Weekly review of water consumption and volume of wastewater generated</li> <li>• Continuous monitoring of wastewater characteristics, including volume, pH, temperature, total organic carbon (TOC), and chemical oxygen demand (COD)</li> <li>• Monitoring and characterisation of combustion waste gases</li> <li>• Monitoring of raw materials usage and reviewed to reduce waste</li> </ul>
3	<p><b>Monitoring key process parameters at key locations for emissions to water.</b></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 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>	CC	<p>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.</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
			<p>The Operator declared that they are continuously monitoring and trend the following parameters for outgoing effluent - pH; flow and TOC. pH is monitored prior to entering the Effluent Treatment Plant (ETP).</p>
4	<p><b>Monitoring emissions to water to the required frequencies and standards.</b>            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>This BATc is concerned with discharges to water of process effluent; this installation does not have such discharges, all process effluent being released to sewer under consent from Thames Water to be further processed in the Deephams Water Treatment Works.</p>
5	<p><b>Monitoring channelled emissions to air to the required frequencies and standards.</b>            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>This BATc is concerned with emissions to air of dust particles resulted from processes such as drying, cooling, grinding, and milling; this installation, being a soft drinks producer, does not have this type process emissions.</p>
6	<p><b>Energy Efficiency</b>            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>	CC	<p>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.</p> <p>The Operator declared that it has an energy management plan, of which an excerpt has been submitted as part of the Reg.61 Response, containing the following headings:</p> <ul style="list-style-type: none"> <li>• Purpose</li> <li>• Scope</li> <li>• Responsibilities</li> </ul>

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"> <li>• Site specific requirements and baseline</li> <li>• Performance management</li> <li>• Communications</li> <li>• Monitoring</li> </ul> <p>The following energy efficiency techniques are used at this installation:</p> <ul style="list-style-type: none"> <li>• burner regulation and control</li> <li>• energy-efficient motors</li> <li>• heat recovery</li> <li>• energy efficient lighting</li> <li>• minimisation blowdown from the boiler</li> <li>• optimising steam distribution systems</li> <li>• preheating feed water (including the use of economisers)</li> <li>• process control systems</li> <li>• reducing compressed air system leaks</li> <li>• reducing heat losses by insulation</li> <li>• variable speed drives</li> <li>• photovoltaic cells</li> </ul>
7	<p><b>Water and wastewater minimisation</b></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> <p>(d) Segregation of water streams</p> <p>Techniques related to cleaning operations:</p> <p>(e) Dry cleaning</p> <p>(f) Pigging system for pipes</p> <p>(g) High-pressure cleaning</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 Operator declared that they are using the following techniques:</p> <ul style="list-style-type: none"> <li>• water recycling and reuse</li> <li>• optimised water nozzles and hoses</li> <li>• pigging systems for some pipework</li> <li>• optimised all CIP sets</li> <li>• low-pressure foam cleaning</li> </ul>



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
	(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"> <li>• cleaning of equipment as soon as possible</li> <li>• Optimised design and construction of equipment and process areas</li> </ul>
8	<p><b>Prevent or reduce the use of harmful substances</b></p> <p>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.</p> <p>(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</p>	CC	<p>The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.</p> <p>The Operator declared that they are using the following techniques:</p> <ul style="list-style-type: none"> <li>• Optimised design and construction of equipment and process areas</li> <li>• Reuse of cleaning chemicals in cleaning-in-place (CIP)</li> </ul>
9	<p><b>Refrigerants</b></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 following main refrigerants with a high global warming potential (GWP) are still in use at this installation:</p> <ul style="list-style-type: none"> <li>• R410A – 2 x Daikin chillers,</li> <li>• R407C – 2 x condensing units, 15 x fan coils</li> <li>• Other gases and assets identified in the Edmonton F Gas ASSET list document dated 31/03/2022.</li> </ul> <p>The Operator demonstrated awareness of the impact these gases can have on the environment and submitted a document titled</p>

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			'Climate Protection Refrigerants and Other Compounds' that looks at the management of all refrigerants used at this installation. In addition, the Operator works with contractors, based on the RS Protocol, to prioritize the replacement of equipment until this fails or becomes beyond economical repair. These systems will be replaced with R32 systems on or before the exchange date.
10	<p><b>Resource efficiency</b> In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:</p> <ul style="list-style-type: none"> <li>(a) Anaerobic digestion</li> <li>(b) Use of residues</li> <li>(c) Separation of residues</li> <li>(d) Recovery and reuse of residues from the pasteuriser</li> <li>(e) Phosphorus recovery as struvite</li> <li>(f) Use of waste water for land spreading</li> </ul>	<b>CC</b>	<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 Operator declared that none of the techniques are applicable to this site, but surplus products are being redistributed or, where this is not possible, used as animal feed. Recovery of waste drinks is also used on site; where this is not possible, part of it is discharged to sewer.</p>
11	<p><b>Waste water buffer storage</b> In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for waste water.</p>	<b>FC</b>	<p>The operator has provided information to support compliance with BATc 11. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 11.</p> <p><b>The Operator declared that they do not have buffer storage for effluent, should an issue be detected, but declared that compliance will be achieved.</b></p> <p>Improvement conditions IC10 have been included in the permit to demonstrate that compliance with BATc 11 is achieved (see Annex 3).</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
12	<p><b>Emissions to water – treatment</b></p> <p>In order to reduce emissions to water, BAT is to use an appropriate combination of the techniques given below.</p> <p>Preliminary, primary and general treatment</p> <p>(a) Equalisation</p> <p>(b) Neutralisation</p> <p>(c) Physical separate (eg screens, sieves, primary settlement tanks etc)</p> <p>Aerobic and/or anaerobic treatment (secondary treatment)</p> <p>(d) Aerobic and/or anaerobic treatment (eg activated sludge, aerobic lagoon etc)</p> <p>(e) Nitrification and/or denitrification</p> <p>(f) Partial nitrification - anaerobic ammonium oxidation</p> <p>Phosphorus recovery and/or removal</p> <p>(g) Phosphorus recovery as struvite</p> <p>(h) Precipitation</p> <p>(i) Enhanced biological phosphorus removal</p> <p>Final solids removal</p> <p>(j) Coagulation and flocculation</p> <p>(k) Sedimentation</p> <p>(l) Filtration (eg sand filtration, microfiltration, ultrafiltration)</p> <p>(m) Flotation</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 process effluent is discharged to sewer for further treatment by Deephams Sewage Treatment Works. Wastewater from the Distribution Yard passes through an oil separator before being discharged. The only wastewater treatment process undertaken on this site are equalisation of effluent volume and pH correction.</p>
12	<p><b>Emissions to water – treatment</b></p> <p><b>BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body</b></p>	NA	<p>We are satisfied that BAT-AELs are not applicable to this installation.</p> <p>The BAT-AELs are applicable to discharges to water of process effluent and this installation discharges effluent only to sewer for further treatment by Deephams Water Treatment Works therefore, the BAT-AELs are not applicable.</p>

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	<table border="1" data-bbox="280 248 1086 571"> <thead> <tr> <th data-bbox="280 248 627 316">Parameter</th> <th data-bbox="627 248 1086 316">BAT-AEL <sup>(15)</sup> <sup>(16)</sup> (daily average)</th> </tr> </thead> <tbody> <tr> <td data-bbox="280 316 627 379">Chemical oxygen demand (COD) <sup>(17)</sup> <sup>(18)</sup></td> <td data-bbox="627 316 1086 379">25-100 mg/l <sup>(19)</sup></td> </tr> <tr> <td data-bbox="280 379 627 443">Total suspended solids (TSS)</td> <td data-bbox="627 379 1086 443">4-50 mg/l <sup>(20)</sup></td> </tr> <tr> <td data-bbox="280 443 627 507">Total nitrogen (TN)</td> <td data-bbox="627 443 1086 507">2-20 mg/l <sup>(21)</sup> <sup>(22)</sup></td> </tr> <tr> <td data-bbox="280 507 627 571">Total phosphorus (TP)</td> <td data-bbox="627 507 1086 571">0,2-2 mg/l <sup>(23)</sup></td> </tr> </tbody> </table> <p data-bbox="280 580 882 603">(16) The BAT-AELs may not apply to the production of citric acid or yeast</p> <p data-bbox="280 612 1218 654">(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.</p> <p data-bbox="280 663 1218 727">(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.</p> <p data-bbox="280 737 1173 778">(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.</p> <p data-bbox="280 788 1227 829">(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.</p> <p data-bbox="280 839 1223 880">(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 <sup>(15)</sup> <sup>(16)</sup> (daily average)	Chemical oxygen demand (COD) <sup>(17)</sup> <sup>(18)</sup>	25-100 mg/l <sup>(19)</sup>	Total suspended solids (TSS)	4-50 mg/l <sup>(20)</sup>	Total nitrogen (TN)	2-20 mg/l <sup>(21)</sup> <sup>(22)</sup>	Total phosphorus (TP)	0,2-2 mg/l <sup>(23)</sup>		
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13	<p data-bbox="280 900 584 925"><b>Noise management plan</b></p> <p data-bbox="280 938 1227 1059">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 data-bbox="280 1072 1227 1276" style="list-style-type: none"> <li>- a protocol containing actions and timelines;</li> <li>- a protocol for conducting noise emissions monitoring;</li> <li>- a protocol for response to identified noise events, eg complaints;</li> <li>- 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.</li> </ul>	NA	<p data-bbox="1525 900 2078 957">We are satisfied that BATc 13 is not applicable to this Installation.</p> <p data-bbox="1525 1008 2069 1193">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>										
14	<p data-bbox="280 1299 524 1324"><b>Noise management</b></p> <p data-bbox="280 1337 1205 1394">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 data-bbox="280 1407 882 1433">(a) Appropriate location of equipment and buildings</p>	CC	<p data-bbox="1525 1299 2069 1449">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>										

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
	(b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement		<p>The Operator declare that they are carrying out annual statutory nuisance surveys around site which include measuring noise in addition to independent site wide noise surveys taking place every 2 years.</p> <p>Complementary, the Operator uses acoustic guards surrounding the internal sugar land-based blower which was installed to remove the need for sugar delivery vehicles to use their own delivery pumps on site.</p>
15	<p><b>Odour Management</b></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"> <li>- a protocol containing actions and timelines;</li> <li>- a protocol for conducting odour monitoring.</li> <li>- a protocol for response to identified odour incidents eg complaints;</li> <li>- 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.</li> </ul>	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>
<b>SOFT DRINKS AND NECTAR/ JUICE MADE FROM PROCESSED FRUIT AND VEGETABLES BAT CONCLUSIONS (BAT 33)</b>			
33	<p><b>Energy efficiency – Soft drinks and nectar/ juice made from processed fruit and vegetables</b></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> <p>The Operator declared that only hydraulic transportation of sugar is used at this site as techniques (a) and (c) are not applicable.</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.	
	(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.		
<b>Soft Drinks and Nectar/ Juice made from processed fruit and vegetables sector Environmental Performance Levels</b>					
EPL	<b>Environmental Performance Level – Energy consumption for the Soft Drinks and Nectar/ Juice made from processed fruit and vegetables sector</b>			<b>CC</b>	<p>The operator has provided information to support compliance with BAT-EPL for energy. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT-EPL.</p> <p>The Operator declared the energy consumption was recorded at 0.006 MWh/hl of product, which is under the lower EPL range of 0.01-0.035 MWh/hl.</p>
	Unit	Specific energy consumption (yearly average)			
	MWh/hl of products	0.01 – 0.035			
EPL	<b>Environmental Performance Level – Specific waste water discharge for the Soft Drinks and Nectar/ Juice made from processed fruit and vegetables sector</b>			<b>CC</b>	<p>The operator has provided information to support compliance with BAT-EPL for wastewater. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BAT-EPL.</p> <p>The Operator declared a volume of discharged water of 0.055 m<sup>3</sup>/hl of product, which is under the lower EPL range of 0.08-0.20 m<sup>3</sup>/hl.</p>
	Unit	Specific waste water discharge (yearly average)			
	m <sup>3</sup> /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.

We have taken this opportunity to change the effluent treatment plant (ETP) from a directly associated activity (DAA) into a Section 5.4 A(1) (a) (ii) listed activity. The change was necessary as the volume of effluent processed by physico-chemical treatment of approximately 800 m<sup>3</sup>/d is above the minimum threshold of 50 m<sup>3</sup>/d required for this ETP process to be considered under the new regime. Because the Operator discharges process effluent to sewer only, there are no additional requirements included in the draft 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 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.

The Reg 61 Response contains three new storage tanks, namely CO<sub>2</sub> Tank (A5), and two Nitrogen Tanks (A6) that have been added to the installation. These tanks, already operational, have not been included and operated through a permit variation. However, the risk from these tanks would be inherently low and we will be adding them in the consolidated permit.

Implementing the requirements of the Medium Combustion Plant Directive

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.	8.4 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler 1: 1.1 MWth Boiler 2: 1.1 MWth Boiler 3: 2.2 MWth Boiler 4: 4.0 MWth
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	All boilers use 100% natural gas with gas oil used for emergencies and maintenance.
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.	Boiler 1: May 2006 Boiler 2: June 2006 Boiler 3: 2007 Boiler 4: October 2016

We have reviewed the information provided and we consider that the declared combustion plants, Boiler 1, Boiler 2, Boiler 3, and Boiler 4, qualify as “existing” medium combustion plant.

For existing MCP with a rated thermal input of less than or equal to 5 MW, Boiler 3 and Boiler 4, the emission limit values set out in tables 1 and 3 of Part 1 of Annex II MCPD shall apply from 1 January 2030.

**The Operator declared that the four scenarios shown in their extant permit are not required anymore as the site conditions on which they were based are not applicable. As part of the Operator’s production growth planning, Boilers 1 and 2 would have been replaced by 2 X 2.6 MWth boilers; this change never took place. As such, we have removed all four scenarios and provided a breakdown in the permit to show the individual MCPs description. While not clearly shown in variation V006, Boiler 4 was made a permanent addition to the site in 2019. This boiler was a pre-existing MCP operating on a Local Enforcement Position (LEP) which became obsolete in 2019 with the issuing of the permit variation V006.**



We have included the appropriate emission limit values for existing medium combustion plant as part of this permit review. See Table S3.1 in the permit. We have also included a new condition 3.1.4 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 [Coca Cola Enterprises Ltd, Edmond: PPC Permit Application Site Report dated March 2005] during the original application received on 24/03/2005. 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.

### **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 confirmed there has been no change in the hazardous substances used, their capability of causing pollution and/or the pollution prevention measures at the installation since the risk assessment was submitted on 24/03/2005. Consequently, we are satisfied there has been no change to the assessment of risk for hazardous substances.

### **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. The Operator has considered the effects of climate change and there are documents looking at mitigation options, but these are not found in a stand-alone, site-specific Climate Adaptation Plan. We have included an improvement condition into the permit (IC12) 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. Because the Primary and Secondary Effluent Tanks are not bunded individually nor have a shared bund with other tanks, we are not satisfied that the existing tanks and containment measures on site meet the standards set out in CIRIA C736.

We have set improvement conditions in the permit to address the deficiencies in the existing tanks and containment measures on site (IC11). See Improvement conditions in Annex 3 of this decision document.

## 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.

<b>Superseded Improvement Conditions – Removed from permit as marked as “complete”</b>	
<b>Reference</b>	<b>Improvement Condition</b>
IC1	The Operator shall provide the Agency with an updated written accident management plan, to include at least but not limited to the following hazards: failure of containment of any of the activities identified in the Application Site Report; pipe leak; accidental spillage or lead threatening contamination of the surface water drainage system; accidental release of volatile gaseous substances, accidental release of ammonia; and the risk of fire from the quantities of oil stored on site. The accident management plan shall address the indicative BAT requirements described in Sector Guidance Note IPPC S6.10, Dec 2002.
IC2	The Operator shall review current storage and bunding arrangements on site, for raw materials and chemicals (including liquid sugar, flavourings etc, citric acid, sodium hydroxide, hydrochloric acid, brine, sodium hypochlorite, acetic acid, gas oil, lube oil and waste oil tanks). The Operator shall identify any storage which does not meet the requirements given in box 5 of Agency Technical Guidance Note IPPC H7, August 2005, and submit a proposal for the installation of bunding or other containment measures for approval by the Agency.
IC3	The Operator shall carry out an assessment of the disposal options available for dealing with wastes from the installation. A written report summarising the findings shall be submitted to the Agency.
IC4	The Operator shall review the options available for measuring and monitoring the CO <sub>2</sub> usage in the carbonation process of soft drinks. A written report summarising available monitoring and targeting options and any proposed reporting of CO <sub>2</sub> usage in the carbonation process shall be submitted to the Agency.
IC5	The Operator shall provide the Agency with a description of the measures in place to ensure that run-off to the surface water sewer cannot receive contaminated water, addressing as a minimum: contaminated firewater; cleaning chemicals; and minor spills. A written report shall be submitted to the Agency.
IC6	The Operator shall carry out a review of the current method of monitoring used to determine effluent flow at release point S1. This review shall compare the current method against the minimum requirements for the self-monitoring of effluent flow set out within Section 5 of the Agency Guidance Note M18: Monitoring of Discharges to Water and Sewer, Version 1, July 2004. A report detailing the findings of the review, recommendations to reach the minimum standards, and implementation timetable shall be submitted to the Agency for approval.

IC7	The Operator shall undertake an assessment of subsurface structures and their potential to cause fugitive emissions to surface water and ground water. The assessment will take into account the requirements of section 2.2.5 of the Agency Guidance Note IPPC S6.10, Dec 2002. A written report summarising the findings with proposals and timescales for any improvements shall be submitted to the Agency.
IC8	The Operator shall undertake an assessment of the surfacing and containment measures including emergency containment measures, on site. The assessment will take into account the requirements of section 2.2.5 of the Agency Guidance Note IPPC S6.10, Dec 2002. A written report summarising the findings shall be submitted to the Agency. A timescale for implementation of any improvements shall be agreed with the Agency.
IC9	The Operator shall develop a written Site Closure Plan with regard to the requirements set out in Section 2.11 of the Agency Guidance Note IPPC S6.10, Dec 2002. Upon completion of the plan a summary of the document shall be submitted to the Agency in writing.

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

<b>Improvement programme requirements</b>		
<b>Reference</b>	<b>Reason for inclusion</b>	<b>Justification of deadline</b>
IC10	<p>The operator shall submit, for approval by the Environment Agency, a report demonstrating achievement of the 'Narrative' BAT conclusions as identified in the Food, Drink and Milk Bref published on 4 December 2019 where BAT 11 is currently not demonstrated or achieved. The report shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Methodology applied for achieving BAT</li> <li>• Demonstrating that BAT has been achieved.</li> </ul> <p>The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BATc 11.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	3 months from permit issued
IC11	<p>The Operator shall undertake a survey of the primary, secondary and tertiary containment of the buffer storage, primary and secondary effluent tanks, and review measures against relevant standard including:</p> <ul style="list-style-type: none"> <li>• CIRIA Containment systems for the prevention of pollution (C736) – Secondary, tertiary and other measures for industrial and commercial premises,</li> <li>• EEMUA 159 - Above ground flat bottomed storage tanks</li> </ul> <p>The operator shall submit a written report to the Environment Agency approval which outlines the</p>	12 months from permit issue

	<p>results of the survey and the review of standard and provide details of</p> <ul style="list-style-type: none"> <li>• current containment measures</li> <li>• any deficiencies identified in comparison to relevant standards,</li> <li>• improvements proposed</li> <li>• time scale for implementation of improvements.</li> </ul> <p>The operator shall implement the proposed improvements in line with the timescales agreed by the Environment Agency</p>	
IC12	<p>The operator shall produce a climate change adaptation plan, which will form part of the EMS. The plan shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Details of how the installation has or could be affected by severe weather;</li> <li>• The scale of the impact of severe weather on the operations within the installation;</li> <li>• An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation.</li> </ul> <p>The Operator shall implement any necessary improvements to a timetable agreed in writing with the Environment Agency.</p>	12 months from permit issue