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/ BN5637IW
The Operator is:	Refresco Drinks UK Limited
The Installation is:	Refresco Bondgate
This Variation Notice number is:	EPR/BN5637IW/V006

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 11/03/2022.

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 10. The operator currently hasn't demonstrated compliance with the requirements of BATc 10. In relation to this BAT Conclusion, the operator has committed to demonstrate in writing that the BAT requirements for this BAT Conclusion were in place on or before 4 December 2023. We have therefore included Improvement Conditions 13 in the Consolidated Variation Notice to ensure that the requirements of the BAT Conclusion and the risk assessment were delivered before or by 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 further information requests on 29/11/2023 and 29/12/2023 regarding up to date copy of ISO14001 certification and the Hazardous Substance section of the Reg 61 Response tools. The copies of the further information requests were 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 assume that the operator has become compliant with BATc 2 by 04/12/2023. The Operator has stated that : a) There is no change to site operations since issue of latest EP; Site Plan showing emission points. b) Water consumption logged and monitored as part of Installation KPIs. Actions to reduce water included in the site EMS objectives and targets. c) KPIs and targets set within site EMS. d) Specific resource efficiency monitoring strategy to be developed and implemented at Group level and cascaded down to site level prior to Dec 2023 deadline.
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 assume that the operator has become compliant with BATc 3 by 04/12/2023.

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
			The operator has stated that the trade effluent streams go to sewer via the onsite waste water treatment plant. Key process parameters including pH, COD and flow are monitored and logged but no data is available for TSS and pH levels are out with the limits on the discharge consent. A review of effluent monitoring and data retention will be undertaken to ensure full compliance with BAT before 4 Dec 2023.
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 Operator has stated that there are no direct emissions to water from the installation other than the trade effluent release to sewer.
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 [refer to BAT5 table in BATc] and in accordance with EN standards.	**NA**	We are satisfied that BATc 5 is not applicable to this Installation. There are no relevant emissions to air in relation to BAT 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 site is working within the Group Level Energy Charter as detailed above. Actions for the site in 2022 include: Focus on compressed air - dropping site compressed air pressure by 0.1 bar every week (from start point of 6.9 bar).

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			Energy use and consequence logging until identification of 'leanest' position found; Steam trap survey scheduled twice yearly with Spirax Sarko - engineering team to carry out any identified required improvements; Investigating whether or not business beneficial to install an economiser on Boiler 1; Investigating reuse of waste heat from compressors - potential for this to be used to pre-heat CO2 prior to the vaporiser; and Installation of sub-metering on site to generate more robust process energy data.
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. [for detail of each technique, refer BAT 7 table in BATc] (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 (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	**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 has stated that they are implementing the following techniques: (a) Water recycling and/or reuse - Final CIP rinse is recovered for CIP first flush (b) Optimisation of water flow - All process plant has orifice plates to control the maximum flow of each plant. (d) Segregation of water streams - RO and towns water segregated Techniques related to cleaning operations: (h) Optimisation of chemical dosing and water use in cleaning-in-place – Conductivity meters are calibrated periodically and installation has

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
			been CIP optimised where possible during the installation/maintenance of lines. (i) Low-pressure foam and/or gel cleaning - Current project to investigate and optimise this process. (j) Optimised design and construction of equipment and process areas – All machinery/equipment is designed specifically for the intended product, process plants are also designed to be as efficient as possible for the intended products. (k) Cleaning of equipment as soon as possible - Cleaning schedule set by product planning and GMP and optimised appropriately.
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 [for detail of each technique, refer BAT 8 table in BATc]	**CC**	The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8. The Operator has stated that they are implementing the following techniques: a) Proper selection of cleaning chemicals and/or disinfectants - All CIP chemicals are assessed regularly and maintained specific to the plant and products being produced - all food grade. (b) Reuse of cleaning chemicals in cleaning-in-place (CIP) - Final CIP rinse is recovered for CIP first flush (d) Optimised design and construction of equipment and process areas – All machinery/equipment is designed specifically for the intended product. Food grade product

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
			so food grade chemicals and lubricants used throughout.
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.	**CC**	The operator has provided information to support compliance with BATc 9. We have assessed the information provided and we assume that the operator has become compliant with BATc 9 by 04/12/2023. The Operator has stated that the site still has ozone-depleting substances and of substances with a high global warming potential in use as detailed in the Refrigerants Log. CAPEX program in place for substitution of ozone depleting and high GWP substances scheduled for 2022-23 to ensure compliance with BAT prior to December 2023.
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	**FC**	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are not satisfied that the operator has demonstrated compliance with BATc 10. The operator has stated that they do not explicitly document how it implements the waste hierarchy for the food and drink sector for its process related waste streams but will undertake this review in 2022 and submit to the EA prior to the 4 Dec 2023 deadline. IC14 has been included in the variation for the operator to meet the narrative BAT.
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.

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
			Effluent treatment plant includes 80,000L above ground buffer tank and a separate underground sump of 80,0000L. Site can be isolated and utilise one or both of these reservoirs to contain emissions for tankering away.
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 [for detail of each technique, refer BAT 12 table 1]	**NA**	We are satisfied that BATc 12 is not applicable to this Installation. The Operator has stated that there are no direct emissions to water from the installation. trade effluent releases to sewer and non-contaminated rainwater is discharged via a soakaway to land.
12	**Emissions to water – treatment** **BAT-associated emission levels (BAT-AELs) for direct emissions to a receiving water body**	**NA**	We are satisfied that BATc 12 is not applicable to this Installation.

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.		There are no direct discharges of process effluent to surface water (discharge is made to sewer).
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. Note: BAT13 is only applicable where a noise nuisance at sensitive receptors is expected and/or has been substantiated.	**NA**	We are satisfied that BATc 13 is not applicable to this Installation. No noise nuisance issues recorded for the installation. The Installation has not received any noise complaints during operation by Refresco; noise nuisance at sensitive receptors is not expected and no noise management plan required under BAT13.
14	**Noise management** 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.	**CC**	The operator has provided information to support compliance with BATc 14. We have assessed the information provided and we are

BATC No.	Summary of BAT Conclusion requirement for Food, Drink and Milk Industries	Status NA/ CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	(a) Appropriate location of equipment and buildings (b) Operational measures (c) Low-noise equipment (d) Noise control equipment (e) Noise abatement [for detail of each technique, refer BAT 14 table in BATCs]		satisfied that the operator has demonstrated compliance with BATc 14. The Operator has stated that equipment with potential for noise emissions is located internally with only FLTs, storage tanks and some process pumps outside. Low noise equipment specified for new installations, and this will be considered for any future replacements..
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. BAT 15 is only applicable to cases where an odour nuisance at sensitive receptors is expected and/or has been substantiated.	**NA**	We are satisfied that BATc 15 is not applicable to this Installation. The Operator has stated that no odour nuisance issues recorded for the installation. The Installation has not received any odour complaints during operation by Refresco; as such no odour nuisance at sensitive receptors is expected and no odour management plan required under BAT15.
SOFT DRINKS AND NECTAR/ JUICE MADE FROM PROCESSED FRUIT AND VEGETABLES BAT CONCLUSIONS (BAT 33)			
33	**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.	**CC**	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. The operator has stated that they accept granulated sugar onto site which is then dissolved into water before being pumped to

<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></td><td>
<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

See Tables below for the EPL figures</td><td></td><td>storage tank on site and then pumped hydraulically to process.</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 current performance is : 0.026 MWh/hl which is within the specified range.</td></tr>
<tr><td>EPL</td><td>Environmental Performance Level – Specific waste water 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 current performance is: 0.1 m^3/hl which is within the specified range.</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
- Site plan
- Table S1.1 overhaul
    - Activity Reference (AR) renumbering
    - Updated listed activities
    - Addition of production capacity
    - Directly associated activities (DAAs) standardisation

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

Capacity Threshold

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

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

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

The 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.

Implementing the requirements of the Medium Combustion Plant Directive

Existing Medium Combustion Plant (1MW-50MW)

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

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

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

Boilers

1. Rated thermal input (MW) of the medium combustion plant.	Boiler 1: 4.7 MWth Boiler 2: 4.7 MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural Gas 100%
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 2002 Boiler 2: Apr 2022

We have reviewed the information provided and we consider that one of the declared combustion plant (Boiler 1) qualify as “existing” medium combustion plant and the other combustion plant (Boiler 2) as “new”.

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

We have included the appropriate emission limit values for the existing and the new medium combustion plants 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 during the original application received on 09/08/2011. 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 not identified any hazardous substances used / stored at the installation.

The operator is required to submit a relevant hazardous substances monitoring plan for review to the Environment Agency via improvement condition IC13.

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 stated that the installation is not likely to be or has previously not been affected by climate change.

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 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 or alternative appropriate measures.

Annex 3: Improvement Conditions

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

Previous improvement conditions marked as complete in the previous permit.

Superseded Improvement Conditions – Removed from permit as marked as "complete"		
Reference	Requirement	Date
IC1	The Operator shall review the measures and procedures that are in place to prevent or reduce fugitive emissions to water and land having regard to Section 2.2.5 of the Agency's Sector Guidance Note IPPC S6.10. The review shall include, but not be limited to, an assessment of the potential risk of contamination posed by the foul drainage system during times of normal and abnormal flow. A written report shall be provided to the Agency detailing any deficiencies identified, the improvements proposed and the time scale for implementation.	Completed
IC2	The Operator shall carry out a water efficiency audit of the installation. The audit shall have regard to the Agency Guidance Note IPPC S6.10 Section 2.4.3, October 2003, and shall provide a breakdown of significant water use by department or activity and shall establish the current installation performance (for example litre water/kg of product) and water efficiency objective(s) for this installation. A summary of the audit shall be sent to the Agency.	Completed
IC3	The Operator shall submit a written report to the Agency detailing proposed improvements to their Environmental Management System (EMS) as follows; • Implement procedures within their EMS to regularly review new developments in raw materials and for the implementation of any suitable ones of improved environmental profile; and • Implement quality assurance procedures within their EMS for controlling the content of raw materials. The Operator shall confirm in writing to the Agency when these procedures are in place.	Completed
IC4	The Operator shall establish, implement and maintain procedures for competence and training needs analysis and training provision, with consideration of the requirements of Section 2.3 Sector Guidance Note S6.10, Issue 1, October 2003. The procedures must ensure all employees have the skills and knowledge necessary to carry out their tasks according to the requirements of the Permit and therefore ensure compliance of the company with the Permit.	Completed

Superseded Improvement Conditions – Removed from permit as marked as "complete"		
Reference	Requirement	Date
IC5	The Operator shall develop and implement a formal Environmental Management System, having regard to the Agency Guidance Note IPPC S6.10 Section 2.3, October 2003.	Completed
IC6	The Operator shall develop and implement a detailed and formalised Accident Management Plan, to include appropriate operational procedures, with the purpose of preventing or minimising releases to the environment in accident scenarios, having regard for the Agency General Sector Guidance for the Food and Drink Sector Section 2.8, IPPC S6.10, Issue 1, October 2003. The accident management plan shall include an appropriate methodology for identifying hazards posed by the Installation, for assessing the risks of those hazards identified and for identifying techniques necessary to reduce those risks. A copy of the accident management plan shall be submitted to the Agency.	Completed
IC7	The Operator shall develop a written Site Closure Plan having regard for the Agency Sector Guidance Note IPPC S6.10, Issue1, October 2003, Section 2.11 and shall submit a copy to the Agency for approval.	Completed
IC8	The Operator shall review and revise the raw materials list specified in Section B2.4 of the Application, to ensure it identifies all raw materials utilised at the Installation and includes the environmental information specified in Section 2.4 of the Sector Guidance S6.10, October 2003. The completed list shall be submitted to the Agency.	Completed
IC9	The Operator shall assess waste disposal streams and review the alternative options available for effluent treatment and disposal, including techniques for minimising and recycling relevant waste streams. The review shall be made having regards to the requirements set out in the Sector Guidance Note IPPC S6.10 and shall demonstrate that the chosen or proposed methods of effluent treatment and disposal represent the best environmental option. A written report shall be submitted to the Agency detailing the findings of the review along with any proposed improvements and a timetable for their implementation.	Completed
IC10	a) The operator shall undertake representative monitoring of the point source air emissions from A1 and A2 as listed in table S3.1. and b) Following the completion of (a) above, the operator shall use the monitoring results to undertake and submit to the Environment Agency for review: i) A full assessment of the emissions to air from the installation in accordance with our guidance; and (ii) Proposals for appropriate measures to mitigate the impact of the emissions where the assessment determines they are not insignificant, including emission limits, monitoring frequencies and methods, and dates for implementation of individual measures. Note: Standard reference conditions in relation to emissions from combustion processes, the concentration in dry air at a	Completed

Superseded Improvement Conditions – Removed from permit as marked as "complete"		
Reference	Requirement	Date
	temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels.	
IC11	The Operator shall carry out an energy efficiency audit of the installation. The audit shall have regard to the relevant sector specific BAT requirements and shall provide a breakdown of significant energy use by department or activity and shall establish the installation performance. A summary of the audit shall be sent to the Environment Agency, with proposed energy efficiency improvements if necessary with timescales for completion.	Completed
IC12	The Operator shall carry out a water efficiency audit of the installation. The audit shall have regard to the relevant sector specific BAT requirements and shall provide a breakdown of significant water use by department or activity and shall establish water efficiency objectives for the installation. A summary of the audit shall be sent to the Environment Agency, with proposed energy efficiency improvements if necessary with timescales for completion.	Completed

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**
IC13	The operator shall submit to the Environment Agency for approval a risk assessment considering the possibility of soil and groundwater contamination at the installation where the activity involves the use, production or release of a hazardous substances (as defined in Article 3 of Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures). A stage 1-3 assessment should be completed (as detailed within the EC Commission Guidance 2014/C 136/-3) as follows; Stage 1 – Identify hazardous substance(s) used / stored on site. Stage 2 – Identify if the hazardous substance(s) are capable of causing pollution. If they are capable of causing pollution, they are then termed Relevant Hazardous Substances (RHS). Stage 3 – Identify if pollution prevention measures & drains are fit for purpose in areas where hazardous substances are used / stored. If the outcomes of Stage 3 identifies that pollution of soil / ground water to be possible. The operator shall produce and submit a monitoring plan to the Environment Agency for approval detailing how the substance(s) will be monitored to demonstrate no	6 months from date of permit issue: DD/MM/2023

	pollution. The operator shall commence monitoring of the RHS within a timescale as agreed by the Environment Agency.	
IC14	The operator shall submit, for approval by Environment Agency, a report demonstrating achievement of the 'Narrative' BAT where BAT was not demonstrated at the time of the Regulation 61 response. The report shall include, but not be limited to, the following: Methodology applied for achieving BAT Demonstrating that BAT has been achieved. The report shall address the BAT Conclusions for Food, Drink and Milk Industries with respect to BAT 10. Refer to BAT Conclusions for a full description of the BAT requirement.	1 month from permit issue.