# 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/LP3541QP
The Operator is: Encirc Limited
The Installation is: The Park

This Variation Notice number is: EPR/LP3541QP/V002

#### 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 01/08/2022 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 02/12/2022.

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 BAT9. 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 Condition IC11 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 09/04/2024 relating to BAT 14, Emission point to Sewer, and Site plan. A copy of the further information request was placed on our public register.

#### 3 The legal framework

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

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

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

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

#### Annex 1: decision checklist regarding relevant BAT Conclusions

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

There are 37 BAT Conclusions.

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

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

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
GEN	ERAL 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.	СС	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 an 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.	СС	The operator has provided information to support compliance with BATc 2. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 2.  The operator has an EMS externally
			accredited to the ISO14001 standard.
3	Monitoring key process parameters at key locations for emissions to water. For relevant emissions to water as identified by the inventory of waste water streams (see BAT 2), BAT is to monitor key process parameters (e.g. continuous monitoring of waste water flow, pH and temperature) at key locations (e.g. at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).	CC	The operator has provided information to support compliance with BATc 3. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 3.
			The operator has stated that the treated effluent from this site is discharged to sewer, in compliance with the Trade Effluent Consent from Wessex Water .
			The following parameters are monitored on a monthly/weekly basis by the monitoring parameters, in accordance with the provisions of the list below: volume of the discharge flow rate of the discharge Collect a flow proportional sample of the discharge over 24 hours

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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
			pH of the discharge temperature of the discharge
			The operator carries out In-line TOC monitoring of effluent in-flow to the effluent plant, TOC pump Inlet checked/cleaned daily.
			24 hr composite sample on the discharge, which is analysed on-site, daily, for COD mg/l
			Continuous pH measurement and automated chemical dosing to maintain the discharge pH within agreed parameters,
			Flow rate m3/hr. (data logged 10minute interval) And Daily temperature °C, (Maximum daily)
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.	N/A	We are satisfied that BATc 4 is not applicable to this Installation  Though not Applicable to the site as they discharge to sewer, the operator carries out the following monitoring; COD - once per day but the effluent is not directly discharged to a receiving water body
5	Monitoring channelled emissions to air to the required frequencies and standards.  BAT is to monitor channelled emissions to air with at least the frequency given and in accordance with EN standards.	N/A	We are satisfied that BATc 5 is not applicable to this Installation
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.
			Operator has an Energy Management System that is certified to the ISO 50001 standard.,

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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 also employs the following techniques: Burner regulation and control; Energy-efficient motors variable speed drives; - on large consumption activities including three new air compressors installed in CY21; Heat recovery with heat exchangers and/or heat pumps (including mechanical vapour recompression); Lighting; - replaced all external industrial lighting with LED in 2020, imminent approval for replacement of internal industrial lighting from fluorescent T5s to LED Minimising blowdown from the boiler; - Yes Preheating feed water (including the use of economisers); —heat recovered from the air compressors and the boiler flue gases to preheat water used for CIP Process control systems; — Line view Reducing compressed air system leaks; — compressed air leak surveys scheduled and also detected through the One Standard monthly area audits Reducing heat losses by insulation; — all process pipework is insulated Use of solar energy - planned for FY23
7	Water and wastewater minimisation In order to reduce water consumption and the volume of wastewater discharged, BAT is to use BAT 7a and one or a combination of the techniques b to k given below.  (a) water recycling and/or reuse (b) Optimisation of water flow (c) Optimisation of water nozzles and hoses (d) Segregation of water streams Techniques related to cleaning operations:	СС	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.  Operator employs the following techniques listed below;  (a) Water recycling and/or reuse  (b) Optimisation of water flow
	(c) Optimisation of water nozzles and hoses (d) Segregation of water streams		listed below; (a) Water recycling and

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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> <li>(f) Pigging system for pipes</li> <li>(g) High-pressure cleaning</li> <li>(h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP)</li> <li>(i) Low-pressure foam and/or gel cleaning</li> <li>(j) Optimised design and construction of equipment and process areas</li> <li>(k) Cleaning of equipment as soon as possible</li> </ul>		Trigger hoses (d) Segregation of water streams (f) Pigging system for pipes - nitrogen gas purging (h) Optimisation of chemical dosing and water use in cleaning-in-place (CIP) (i) Low-pressure foam and/or gel cleaning - low-pressure foam and/or gel to clean walls, floors and/or equipment surfaces.
8	Prevent or reduce the use of harmful substances In order to prevent or reduce the use of harmful substances, e.g. in cleaning and disinfection, BAT is to use one or a combination of the techniques given below.  (a) Proper selection of cleaning chemicals and/or disinfectants  (b) Reuse of cleaning chemicals in cleaning-in-place (CIP)  (c) Dry cleaning  (d) Optimised design and construction of equipment and process areas	CC	The operator has provided information to support compliance with BATc 8. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 8.  Operator employs the following techniques; (a) Proper selection of cleaning chemicals and/or disinfectants (b) Reuse of cleaning chemicals in cleaning-in-place (CIP)
9	Refrigerants In order to prevent emissions of ozone-depleting substances and of substances with a high global warming potential from cooling and freezing, BAT is to use refrigerants without ozone depletion potential and with a low global warming potential.	FC	The operator has indicated they will be future compliant.  Site uses refrigerants with high global warming potentials.  R410a - ODP (zero), GWP - 2088  R407c - ODP (zero), GWP - 1774  We consider that the operator will be future compliant with BATc 9. Improvement condition IC11 has been included in the permit to achieve compliance (see Annex 3).
10	Resource efficiency In order to increase resource efficiency, BAT is to use one or a combination of the techniques given below:  (a) Anaerobic digestion	СС	The operator has provided information to support compliance with BATc 10. We have assessed the information provided and we are

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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) Use of residues (c) Separation of residues (d) Recovery and reuse of residues from the pasteuriser		satisfied that the operator has demonstrated compliance with BATc 10.
	(e) Phosphorus recovery as struvite (f) Use of wastewater for land spreading		The Operator employs separation of residues by ensuring solid waste residues are separated at source. The sludges from the effluent treatment are taken off site for AD.
11	Waste water buffer storage In order to prevent uncontrolled emissions to water, BAT is to provide an appropriate buffer storage capacity for wastewater.	СС	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.
			Operator uses two 275m³ capacity balance tanks in combination with the 40m³ divert tank to provide 43 hours storage on annual average effluent discharge volumes
			The two balance tanks are situated within an appropriately sized bund.
			for each of the uncontaminated surface water discharge points there is an oil/water interceptor before each outfall sump preventing hydrocarbon spills from reaching controlled water. A pH probe is also located in each of the 2 uncontaminated surface water discharge outfall sumps. These pH meters control (close) the automated Pollution Containment Devices (PCD) on each outfall if the high/low trigger thresholds are breached. All SWDs were retrospectively 'lined' in 2016 to ensure the integrity of the SWD.
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	cc	The operator has provided information to support compliance with BATc 12. We have assessed the information provided and we are satisfied that the operator has demonstrated compliance with BATc 12.

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BATC No.	Summary of BAT Conclusio Industries	n requirement for Food, Drink and N	lilk	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) Equalisation				
	(b) Neutralisation				Operator employs the following techniques
	(c) Physical separate (e.g. scr Aerobic and/or anaerobic trea	reens, sieves, primary settlement tanks tment (secondary treatment)	etc)		from the list of primary treatment such as; (a) Equalisation
	(d) Aerobic and/or anaerobic t etc)	treatment (e.g. activated sludge, aerobi	c lagoon		(b) Neutralisation (c) Physical separation (e.g. screens on the inflow)
	(e) Nitification and/or denitrific	ation			illiow)
	(f) Partial nitration - anaerobic	ammonium oxidation			
	Phosphorus recovery and/or r	removal			
	(g) Phosphorus recovery as st	truvite			
	(h) Precipitation				
	(i) Enhanced biological phosphorus removal Final solids removal				
	(j) Coagulation and flocculatio	n			
	(k) Sedimentation				
	(I) Filtration (e.g. sand filtration	n, microfiltration, ultrafiltration)			
	(m) Flotation				
12	Emissions to water – treatm BAT-associated emission le receiving water body	ent evels (BAT-AELs) for direct emission	s to a	N/A	We are satisfied that the BAT-AELs associated with BATc 12 are not applicable to this Installation.
	Parameter	BAT-AEL ( <sup>15</sup> ) ( <sup>16</sup> ) (daily average)			All process effluent is treated and discharged to the foul sewer under a trade effluent consent from Wessex Water.
	Chemical oxygen demand (COD) (17) (18)	25-100 mg/1 ( <sup>19</sup> )			Consent from Wessex Water.
	Total suspended solids (TSS)	4-50 mg/1 ( <sup>20</sup> )			
	Total nitrogen (TN)	2-20 mg/1 ( <sup>21</sup> ) ( <sup>22</sup> )			
	Total phosphorus (TP)	0,2-2 mg/1 ( <sup>23</sup> )			
	(16) The BAT-AELs may not apply to the p	roduction of citric acid or yeast			

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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> <li>(17) No BAT-AEL applies for biochemical oxygen demand (BOD). As an indication, the yearly average BOD5 level in the effluent from a biological wastewater treatment plant will generally be ≤ 20 mg/l.</li> <li>(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.</li> <li>(20) The lower end of the range is typically achieved when using filtration (e.g. sand filtration, microfiltration,</li> </ul>		
	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 wastewater is low (e.g. below 12 °C) for prolonged periods.		
13	Noise management plan In order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to set up, implement and regularly review a noise management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:  - a protocol containing actions and timelines;  - a protocol for conducting noise emissions monitoring;  - a protocol for response to identified noise events, e.g. 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.	N/A	We are satisfied that BATc 13 is not applicable to this Installation.  BATc 13 is only applicable where a noise nuisance at sensitive receptors is expected or has been substantiated.
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.  (a) Appropriate location of equipment and buildings  (b) Operational measures  (c) Low-noise equipment  (d) Noise control equipment  (e) Noise abatement	CC	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.  Operator employs the following techniques;  a) Appropriate location of equipment and buildings  • Packaging activities take place in the centre (approximately) of the building. The packaging activities are surrounded on all four sides by other quiet activities, i.e. offices, laboratory, warehouse and materials stores, all

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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> <li>insulated from the packaging operations. The distance to site boundary is 57m, beyond that an earth bank and tree line.</li> <li>b) Operational measures         <ul> <li>Noise surveys are carried out by our H&amp;S Team to ensure the noise levels are controlled to acceptable limits.</li> <li>Engineering controls, such as conveyors that slow down, rather than stop suddenly, to ensure bottles are not banging together</li> </ul> </li> <li>c) Noise control equipment.         <ul> <li>Activities that have prolonged high levels of noise (i.e. air compressors) are situated within the building and have been fitted in acoustic containers.</li> </ul> </li> </ul>
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 e.g. 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.	N/A	We are satisfied that BATc 15 is not applicable to this Installation.  BATc 15 is only applicable where an odour nuisance at sensitive receptors is expected or has been substantiated.

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

#### Updating permit during permit review consolidation

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

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

#### **Capacity Threshold**

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

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

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

The H1 assessment is not valid for the maximum capacity stated within the permit or if production is now higher. We have included an improvement condition within the permit (IC12) which requires the operator to revisit their H1 risk assessment of water emissions at the capacity limit figure that is now stated 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.

#### <u>Implementing the requirements of the Medium Combustion Plant Directive</u>

#### 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 below:

#### **Boilers**

1. Rated thermal input (MW) of the medium combustion plant.	3.86MWth	3.86MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	Boiler	Boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	Natural gas 99.8% and Gas Oil 0.20%	Natural gas 99.8% and Gas Oil 0.20%
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.	March 2008	March 2008

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

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 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 [Main Site Condition Report 5206561 22/08/2008] during the original application received on 22/09/2008. 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 provided a short risk assessment on the hazardous substances stored and used at the installation. The risk assessment was a stage 1-3 assessment as detailed within EC Commission Guidance 2014/C 136/03.

The stage 1 assessment identified the hazardous substances used / stored on site. The stage 2 assessment identified if hazardous substances are capable of causing pollution. If they are capable of causing pollution, they are then termed Relevant

Hazardous Substances (RHS). The Stage 3 assessment identified if pollution prevention measures are fit for purpose in areas where hazardous substances are used / stored. This includes drains as well.

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

#### **Climate Change Adaptation**

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

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

We do not consider the operator to have submitted a suitable climate change adaptation plan for the installation. We have included an improvement condition into the permit (IC13) 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 appliable.

The Operator provided details of all tanks;

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

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

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

#### **Annex 3: Improvement Conditions**

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

Previous improvement conditions marked as complete in the previous permit.

Superseded "complete"	Improvement Conditions - Removed from permit as marked as	
Reference	Improvement Condition	
IC1	The Operator shall notify the Environment Agency in writing of the date when commissioning the installation is complete.	
IC2	A written procedure shall be submitted to the agency detailing the measures to be used so that monitoring equipment, personnel and organisations employed for the emissions monitoring program shall have either MCERTS certification or accreditation in accordance with condition 3.5.3. The notification requirements of condition 2.5.1 shall be deemed to have been complied with on submission of the procedure. The procedure shall be implemented by the Operator from the date of approval in writing by the Agency.	
IC3	The Operator shall submit a written commissioning report to the Environment Agency, providing details of the performance of the installation against the conditions of this Permit and any minor operational changes to the information provided in the original permit application documents.	
IC4	The Operator shall provide a written report to the Environment Agency, following a review of the impact of emissions on the environment from the first six months of operation post completion of commissioning.	
IC5	The Operator shall develop and implement an Environmental Management System in accordance with ISO 14001. The Operator shall then seek certification of the system.	
IC6	The Operator shall prepare a site closure plan. It shall contain a closure and decommissioning plan that is consistent with indicative BAT guidance in Section 2.11 of Technical Guidance Note "IPPC Sector Guidance Note Food and Drink". The report shall include evidence of procedures to ensure that the plan is subject to review following incidents and at a suitable frequency. The Operator shall implement the plan from the Environment Agency's date of approval.	
IC7	The Operator shall present data for the effluent volume in terms of the final product volume such that the effluent: product ratio can be used to monitor the effluent flow to ensure that the product loss to effluent and the use of water is minimised on site. The Operator shall propose a ratio for the effluent: finished product to be used as a limit in table 4.3 following agreement in writing with the Environment Agency.	
IC8	The Operator shall submit a written report to the Environment Agency for approval which details the amounts and types of waste generated after commencement of blending and packaging at Accolade Park. The report should include waste reduction measures if there is a sustained increase in waste generated above the figures outlined in the application Non-Technical Summary Waste Management section.	
IC9	Following commissioning of the new on-site blending and nitrogen generation processes, the Operator shall present data for the effluent volume in terms of the final product volume such that the effluent: product ratio can be used to monitor the effluent flow to ensure that the product loss to effluent and the use of water is minimised on site. The Operator shall	

	propose a ratio for the effluent: finished product to be used as a limit in Table S3.3 following agreement in writing with the Environment Agency.
IC10	The Operator shall submit a written report to the Environment Agency for approval which details the results of a review of the feasibility and applicability of installing remote shut off activation of the two-surface water pollution containment devices within the gatehouse. The report should assess against indicative BAT (Best Available Techniques) and include any changes to the management and control of ethanol tankers and containerised deliveries on site as a result of implementation of this remote shut off.  The Operator shall implement any proposals in the review agreed by the Environment Agency to the proposed timescale from the date of approval.

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	
IC11	The operator shall use refrigerants without ozone depletion potential and with a low global warming potential (GWP) in accordance with BAT 9 from the Food, Drink and Milk Industries BATCs.  To demonstrate compliance against BAT 9, the operator shall produce a plan for the onsite refrigerant system(s) at the installation. The plan is to be assessed by the Environment Agency and shall be incorporated within the existing environmental management system.  The plan should include, but not be limited to, the following:  • Where practicable, retro filling systems containing high GWP refrigerants e.g. R-404A with lower GWP alternatives as soon as possible.  • An action log with timescales, for replacement of end-of-life equipment using refrigerants with the lowest practicable GWP.	14/01/2025 3 months from date of issue or as agreed in writing by the Environment Agency	
IC12	The operator shall review and update the H1 risk assessment for emissions to air and sewer at the capacity levels stated within table S1.1 of this permit. The H1 shall be submitted to the Environment Agency for review.	14/10/2025 12 months from date of issue or other date as agreed in writing with the Environment Agency	
IC13	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: • Details of how the installation has or could be affected by severe weather;	14/10/2025 12 months from date of issue or other date as	

operations within the installation; • An action plan and timetable for any improvements to be made to minimise the impact of severe weather at the installation.	agreed in writing with the Environment Agency